

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTACDR1614

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 NOV 21 CAS patent coverage to include exemplified prophetic substances identified in English-, French-, German-, and Japanese-language basic patents from 2004-present
NEWS 3 NOV 26 MARPAT enhanced with FSORT command
NEWS 4 NOV 26 CHEMSAFE now available on STN Easy
NEWS 5 NOV 26 Two new SET commands increase convenience of STN searching
NEWS 6 DEC 01 ChemPort single article sales feature unavailable
NEWS 7 DEC 12 GBFULL now offers single source for full-text coverage of complete UK patent families
NEWS 8 DEC 17 Fifty-one pharmaceutical ingredients added to PS
NEWS 9 JAN 06 The retention policy for unread STNmail messages will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 10 JAN 07 WPIDS, WINDEX, and WPIX enhanced Japanese Patent Classification Data
NEWS 11 FEB 02 Simultaneous left and right truncation (SLART) added for CERAB, COMPUB, ELCOM, and SOLIDSTATE
NEWS 12 FEB 02 GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13 FEB 06 Patent sequence location (PSL) data added to USGENE
NEWS 14 FEB 10 COMPENDEX reloaded and enhanced
NEWS 15 FEB 11 WTEXTILES reloaded and enhanced
NEWS 16 FEB 19 New patent-examiner citations in 300,000 CA/Cplus patent records provide insights into related prior art
NEWS 17 FEB 19 Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01
NEWS 18 FEB 23 Several formats for image display and print options discontinued in USPATFULL and USPAT2
NEWS 19 FEB 23 MEDLINE now offers more precise author group fields and 2009 MeSH terms
NEWS 20 FEB 23 TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 Mesh terms
NEWS 21 FEB 23 Three million new patent records blast AEROSPACE into STN patent clusters
NEWS 22 FEB 25 USGENE enhanced with patent family and legal status display data from INPADOCDB
NEWS 23 MAR 06 INPADOCDB and INPAPAMDB enhanced with new display formats
NEWS 24 MAR 11 EPFULL backfile enhanced with additional full-text applications and grants
NEWS 25 MAR 11 ESBIOTBASE reloaded and enhanced
NEWS 26 MAR 20 CAS databases on STN enhanced with new super role for nanomaterial substances
NEWS 27 MAR 23 CA/Cplus enhanced with more than 250,000 patent equivalents from China

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 08:26:39 ON 30 MAR 2009

```

=> file reg
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY        SESSION
FULL ESTIMATED COST          0.22          0.22

```

FILE 'REGISTRY' ENTERED AT 08:26:54 ON 30 MAR 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 MAR 2009 HIGHEST RN 1128305-29-2

New CAS Information Use Policies, enter HELP USAGETER

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

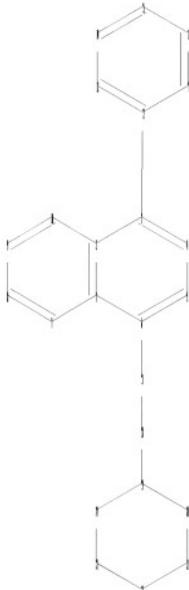
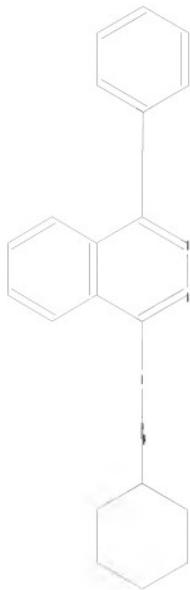
Please note that search-term pricing does apply when

REGISTRY includes numerically searchable data for experiments involving the following:

predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

[View Details](#) | [Edit](#) | [Delete](#)

Uploading C:\Program Files\STNEXP\Queries\10552340s1.str



```

chain nodes :
11 18
ring nodes :
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 19 20 21 22 23 24
chain bonds :
3-12 6-11 11-18 18-19
ring bonds :
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17 19-20 19-24 20-21 21-22 22-23 23-24
exact/norm bonds :
6-11 11-18 19-20 19-24 20-21 21-22 22-23 23-24
exact bonds :
3-12 18-19
normalized bonds :
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:Atom
20:Atom 21:Atom 22:Atom 23:Atom 24:Atom

```

L1 STRUCTURE UPLOADED

=> d 11
L1 HAS NO ANSWERS
L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam
SAMPLE SEARCH INITIATED 08:27:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 456 TO ITERATE

100.0% PROCESSED 456 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

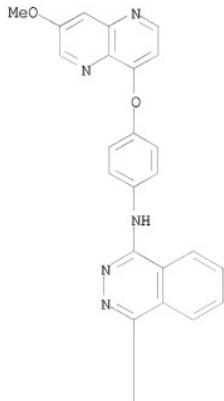
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 7839 TO 10401
PROJECTED ANSWERS: 1316 TO 2484

L2 50 SEA SSS SAM L1

=> d scan

L2 50 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxylphenyl]-
MF C29 H20 Cl N5 O2

PAGE 1-A

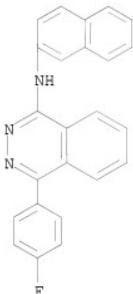




PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

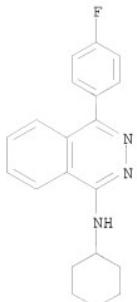
L2 50 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN 1-Phtalazinamine, 4-(4-fluorophenyl)-N-2-naphthalenyl-
MF C24 H16 F N3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L2 50 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN 1-Phtalazinamine, N-cyclohexyl-4-(4-fluorophenyl)-
MF C20 H20 F N3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 11 sss full
FULL SEARCH INITIATED 08:28:10 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 9553 TO ITERATE

100.0% PROCESSED 9553 ITERATIONS 1887 ANSWERS
SEARCH TIME: 00.00.01

L3 1887 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
186.36 186.58

FILE 'CAPLUS' ENTERED AT 08:28:15 ON 30 MAR 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 30 Mar 2009 VOL 150 ISS 14
FILE LAST UPDATED: 29 Mar 2009 (20090329/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 13          102 L3
L4
=> s 13 and nadph
      102 L3
      45573 NADPH
      1 NADPHS
      45573 NADPH
      (NADPH OR NADPHS)
L5          1 L3 AND NADPH

=> d ibib abs hitstr 1

L5  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:872710  CAPLUS
DOCUMENT NUMBER: 141:343540
TITLE: Specific NAD(P)H oxidase inhibitor
INVENTOR(S): Yamamoto, Toshihiro; Yamada, Kumi
PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan
SOURCE: PCT Int. Appl., 40 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
```

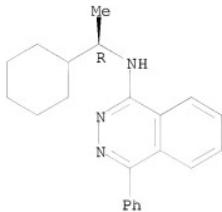
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2004089412 | A1 | 20041021 | WO 2004-JP5065 | 20040408 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG | | | | |
| EP 1616576 | A1 | 20060118 | EP 2004-726653 | 20040408 |
| R: AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| US 20070082910 | A1 | 20070412 | US 2006-552340 | 20061212 |
| PRIORITY APPLN. INFO.: | | | JP 2003-103576 | A 20030408 |
| | | | WO 2004-JP5065 | W 20040408 |

OTHER SOURCE(S): MARPAT 141:343540

AB An inhibitor for the hyperfunction of NAD(P)H oxidase containing a compound which substantially does not inhibit NADPH oxidase originating in leukocytes but inhibits NAD(P)H oxidase originating in tissues other than leukocytes, and a medicinal composition containing the same.
IT 149549-14-4 774233-42-0
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bicyclic pyridazine analogs as tissue specific NAD(P)H oxidase

inhibitors for treatment of diseases)
RN 149549-14-4 CAPLUS
CN 1-Phthalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

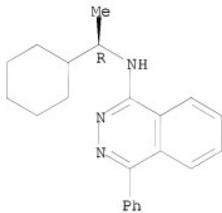


RN 774233-42-0 CAPLUS
CN 1-Phthalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl-,
(2Z)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 149549-14-4
CMF C22 H25 N3

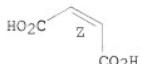
Absolute stereochemistry.



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT:

16

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

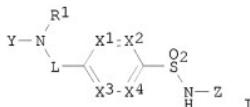
=> s 13
L6 102 L3

=> d ibib abs hitstr 1-102

L6 ANSWER 1 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:92562 CAPLUS
DOCUMENT NUMBER: 150:168338
TITLE: Preparation of substituted N-thiazolyl
benzenesulfonamides as sodium channel inhibitors
INVENTOR(S): Fulp, Alan Bradley; Johnson, Matthew Scott; Markworth,
Christopher John; Marron, Brian Edward; Seconi,
Derrick Conway; West, Christopher William; Wang,
Xiaodong; Zhou, Shulan
PATENT ASSIGNEE(S): Icagen, Inc., USA
SOURCE: PCT Int. Appl., 175pp.
CODEN: PIXKD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2009012242 | A2 | 20090122 | WO 2008-US70019 | 20080714 |
| WO 2009012242 | A3 | 20090305 | | |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| US 20090023740 | A1 | 20090122 | US 2008-173012 | 20080714 |
| PRIORITY APPLN. INFO.: | | | US 2007-949745P | P 20070713 |
| | | | US 2007-954980P | P 20070809 |

OTHER SOURCE(S): MARPAT 150:168338
GI



AB Compds., compns. and methods are provided which are useful in the treatment of diseases through the inhibition of sodium ion flux through voltage-gated sodium channels. More particularly, the invention provides substituted sulfonamides I [Z = 5-membered heteroaryl having 1-4 heteroatoms selected from N, O or S, and 6-membered heteroaryl having 1-3 N atoms; Y = 5-membered heteroaryl having 1-4 heteroatoms selected from N, O or S, 6-membered heteroaryl having 1-3 N atoms, and aryl optionally

fused with a 5-membered heteroaryl having 1-2 heteroatoms selected from O, N and S; or Y and X1 are taken together to form a 5-membered fused heteroaryl having 0-2 addnl. N atoms and R1 is a lone pair; X1-X4 = N or CR2 (R2 = H, halo, OH, etc.); L = a bond, or L, the aromatic carbon atom to which L is attached, and X1 taken together form a fused 5-6 membered carbocyclic ring, etc.; R1 = H, a lone pair or alkyl; with the proviso], compns. comprising these compds., as well as methods of using these compds. or compns. in the treatment of central or peripheral nervous system disorders, particularly pain and chronic pain by blocking sodium channels associated with the onset or recurrence of the indicated conditions. Over two hundred compds. I were prepared. For example, reacting 2-aminothiazole with 4-bromo-2-fluorobenzenesulfonyl chloride afforded 36% < 2 μ M in HEK cells transfected with hSCN3A or hSCN9A. The compds. I, compns. and methods of the present invention are of particular use for treating neuropathic or inflammatory pain by the inhibition of ion flux through a voltage-gated sodium channel.

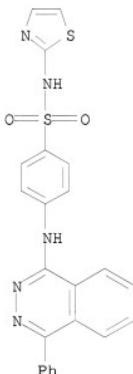
IT 376621-42-0P 376623-34-6P 378202-95-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted N-thiazolyl benzenesulfonamides as sodium channel inhibitors)

RN 376621-42-0 CAPLUS

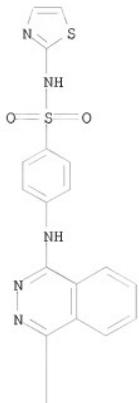
CN Benzenesulfonamide, 4-[(4-phenyl-1-phthalazinyl)amino]-N-2-thiazolyl- (CA INDEX NAME)



RN 376623-34-6 CAPLUS

CN Benzenesulfonamide, 4-[(4-(4-chlorophenyl)-1-phthalazinyl)amino]-N-2-thiazolyl- (CA INDEX NAME)

PAGE 1-A

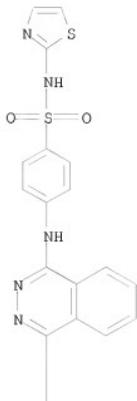


PAGE 2-A



RN 378202-95-0 CAPLUS

CN Benzenesulfonamide, 4-[(4-(4-methylphenyl)-1-phthalazinyl]amino]-N-2-thiazoly-1- (CA INDEX NAME)



L6 ANSWER 2 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 20081300186 CAPLUS
 DOCUMENT NUMBER: 149:506167
 TITLE: Use of NMDA antagonists, tramadol compounds, capsaicinoids, and phosphodiesterase V inhibitors in improved treatments for sexual dysfunction, including premature ejaculation, in humans
 INVENTOR(S): Singh, Chandra Ulagaraj
 PATENT ASSIGNEE(S): Trinity Laboratories Inc., USA
 SOURCE: PCT Int. Appl., 72pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2008131256 | A1 | 20081030 | WO 2008-US60874 | 20080418 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, | | | | |

FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
 KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
 ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
 PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2007-912760P P 20070419

OTHER SOURCE(S): MARPAT 149:506167

AB The invention provides methods and compns. for the treatment of a sexual dysfunction, e.g. premature ejaculation. In certain embodiments, a NMDA antagonist (e.g., dextromethorphan) is administered to a subject in combination with tramadol or a tramadol derivative to treat premature ejaculation. In certain embodiments, a capsaicinoid (e.g., capsaicin) and/or a phosphodiesterase type V inhibitor (e.g., sildenafil citrate) are further administered to the subject. Pharmaceutical preps. such as tablets and capsules are provided. Preparation of capsaicin palmitate is described.

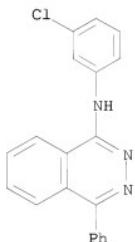
IT 78351-75-4, MY5445

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(NMDA antagonists, tramadol compds., capsaicinoids, and phosphodiesterase V inhibitors in treatment for sexual dysfunction, including premature ejaculation)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1247812 CAPLUS

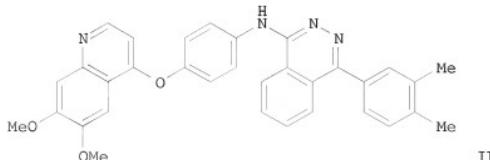
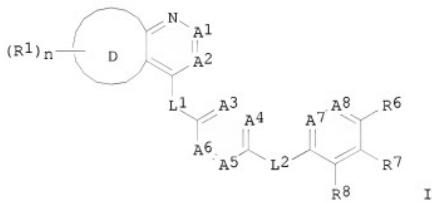
DOCUMENT NUMBER: 149:471489

TITLE: Phthalazinamine derivatives and related compounds as aurora kinase modulators and their preparation, pharmaceutical compositions and use in the treatment or cancer and cancer related diseases

INVENTOR(S): Cee, Victor J.; Deak, Holly L.; Geuns-Meyer, Stephanie D.; Du, Bingfan; Hodous, Brian L.; Martin, Mathew W.; Nguyen, Hanh Nho; Olivieri, Philip R.; Panter, Kathleen; Romero, Karina; Schenkel, Laurie; White, Ryan

PATENT ASSIGNEE(S): Amgen Inc., USA
 SOURCE: PCT Int. Appl., 211pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2008124083 | A2 | 20081016 | WO 2008-US4432 | 20080403 |
| WO 2008124083 | A3 | 20090115 | | |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| US 20090069297 | A1 | 20090312 | US 2008-80669 | 20080403 |
| PRIORITY APPLN. INFO.: US 2007-922205P P 20070405 | | | | |
| OTHER SOURCE(S): MARPAT 149:471489 | | | | |
| GI | | | | |



AB The invention relates to chemical compds. having a general formula I, and synthetic intermediates, which are capable of modulating various protein kinase receptor enzymes and, thereby, influencing various disease states and conditions related to the activities of such kinases. Compds. of

formula I wherein A1 and A2 are independently N and CR2, provided that no more than one of A1 and A2 is N; A3, A4, A5 and A6 are independently N and CR4 provided that no more than two of A3, A4, A5 and A6 is N; L1 and L2 are independently O, NH and derivs., S, CO, SO, SO2 and (un)substituted methylene; A7 and A8 are independently N and CR5 proved that at least one of A7 and A8 is N; ring D is (un)substituted 5- to 6-membered (hetero)cyclic ring; each R1, R2, R3, R5, R6, R7 and R8 are independently halo, haloalkyl, haloalkoxy, oxo, CN, OH, SH, NO2, NH2, etc.; and pharmaceutically acceptable salts thereof, are claimed. For example, the compds. are capable of modulating Aurora kinase thereby influencing the process of cell cycle and cell proliferation to treat cancer and cancer-related diseases. The invention also includes pharmaceutical compns., including the compds., and methods of treating disease states related to the activity of Aurora kinase. Example compound II was prepared by a general procedure (some procedure given). All the invention compds. were evaluated for their aurora kinase modulatory activity. From the assay, it was determined that compound II exhibited IC50 values of 0.014 μ M and 0.032 μ M against aurora A and B, resp.

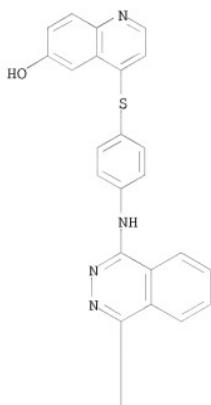
IT 1071535-04-0P

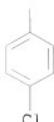
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate and intermediate; preparation of phthalazinamine derivs. and related compds. as aurora kinase modulators useful in the treatment of cancer and cancer-related diseases)

RN 1071535-04-0 CAPLUS

CN 6-Quinolinol, 4-[[4-[(4-(4-chlorophenyl)-1-phthalazinyl]amino)phenyl]thio]-
(CA INDEX NAME)

PAGE 1-A



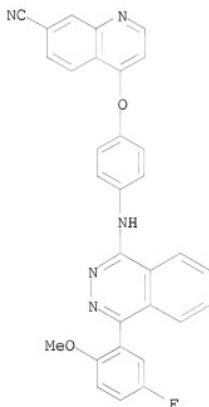


IT 1071529-35-5P 1071530-23-8P 1071530-26-1P
 1071530-82-9P 1071532-39-2P 1071532-73-4P
 1071533-73-7P 1071534-72-9P 1071535-50-6P
 1071536-16-7P 1071538-53-8P 1071539-08-6P
 1071539-30-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (drug candidate; preparation of phthalazinamine derivs. and related compds.
 as aurora kinase modulators useful in the treatment of cancer and
 cancer-related diseases)

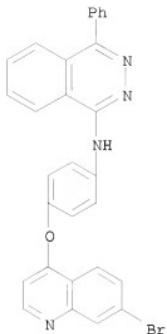
RN 1071529-35-5 CAPLUS

CN 7-Quinolinecarbonitrile, 4-[4-[(4-(5-fluoro-2-methoxyphenyl)-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)



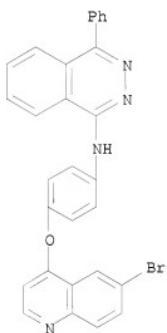
RN 1071530-23-8 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-bromo-4-quinolinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071530-26-1 CAPLUS

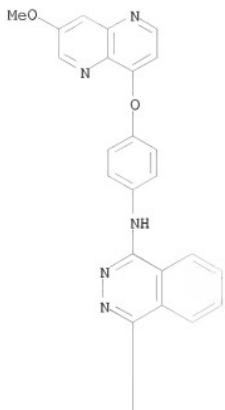
CN 1-Phtalazinamine, N-[4-[(6-bromo-4-quinolinyloxy)phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071530-82-9 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

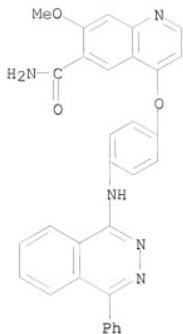
PAGE 1-A



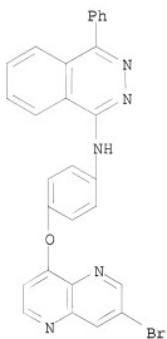
PAGE 2-A



RN 1071532-39-2 CAPLUS
CN 6-Quinolinecarboxamide, 7-methoxy-4-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)

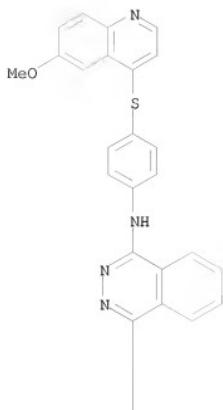


RN 1071532-73-4 CAPLUS
 CN 1-Phtalazinamine, N-[4-((7-bromo-1,5-naphthyridin-4-yl)oxy)phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071533-73-7 CAPLUS
 CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(6-methoxy-4-quinolinyl)thiophenyl]- (CA INDEX NAME)

PAGE 1-A



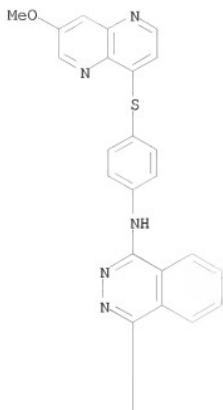
PAGE 2-A



RN 1071534-72-9 CAPLUS

CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

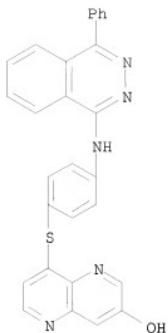


PAGE 2-A



RN 1071535-50-6 CAPLUS

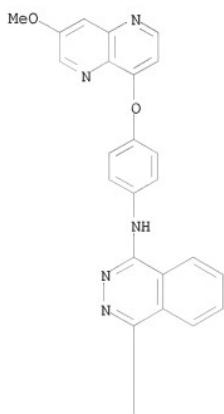
CN 1,5-Naphthyridin-3-ol, 8-[(4-[(4-phenyl-1-phthalazinyl)amino]phenyl)thio]-
(CA INDEX NAME)



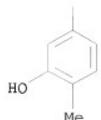
RN 1071536-16-7 CAPLUS

CN Phenol, 5-[4-[(4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl)amino]-1-phthalazinyl]-2-methyl- (CA INDEX NAME)

PAGE 1-A



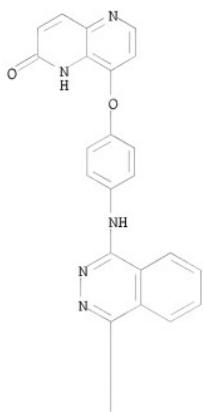
PAGE 2-A



RN 1071538-53-8 CAPLUS

CN 1,5-Naphthyridin-2(1H)-one, 8-[4-[(4-(4-chlorophenyl)-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)

PAGE 1-A



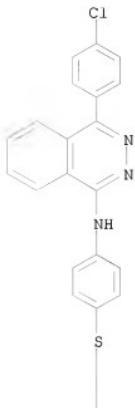
PAGE 2-A



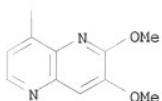
RN 1071539-08-6 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(6,7-dimethoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

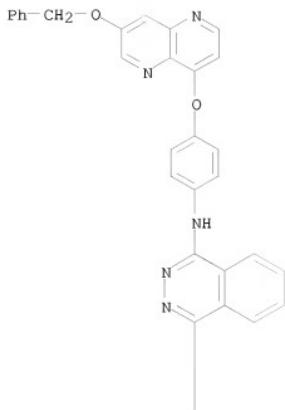


PAGE 2-A



RN 1071539-30-4 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-(phenylmethoxy)-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



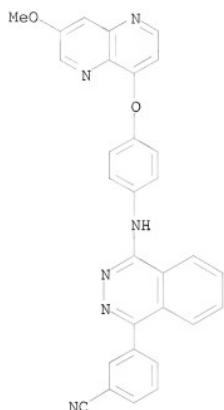
| | | | |
|----|---------------|---------------|---------------|
| IT | 1071528-55-6P | 1071528-67-0P | 1071528-74-9P |
| | 1071528-77-2P | 1071528-80-7P | 1071528-82-9P |
| | 1071528-84-1P | 1071528-86-3P | 1071528-88-5P |
| | 1071528-91-0P | 1071528-92-1P | 1071528-94-3P |
| | 1071528-99-8P | 1071529-03-7P | 1071529-07-1P |
| | 1071529-08-2P | 1071529-17-3P | 1071529-19-5P |
| | 1071529-21-9P | 1071529-24-2P | 1071529-37-7P |
| | 1071529-38-8P | 1071529-39-9P | 1071529-40-2P |
| | 1071529-42-4P | 1071529-46-8P | 1071529-49-1P |
| | 1071529-63-9P | 1071529-66-2P | 1071529-67-3P |
| | 1071529-80-0P | 1071529-89-9P | 1071530-00-1P |
| | 1071530-30-7P | 1071530-33-0P | 1071530-37-4P |
| | 1071530-41-0P | 1071530-43-2P | 1071530-49-8P |
| | 1071530-50-1P | 1071530-62-5P | 1071530-64-7P |
| | 1071530-70-5P | 1071530-79-4P | 1071530-86-3P |
| | 1071530-90-9P | 1071530-92-1P | 1071530-94-3P |
| | 1071530-96-5P | 1071530-98-7P | 1071531-00-4P |
| | 1071531-11-7P | 1071531-26-4P | 1071531-32-2P |
| | 1071531-36-6P | 1071531-40-2P | 1071531-46-8P |
| | 1071531-58-2P | 1071531-61-7P | 1071531-70-8P |
| | 1071531-71-9P | 1071531-74-2P | 1071531-75-3P |
| | 1071531-77-5P | 1071531-79-7P | 1071531-88-8P |

1071531-90-2P 1071531-93-5P 1071531-97-9P
1071532-01-8P 1071532-02-9P 1071532-04-1P
1071532-05-2P 1071532-10-9P 1071532-14-3P
1071532-17-6P 1071532-24-5P 1071532-28-9P
1071532-29-0P 1071532-32-5P 1071532-38-1P
1071532-41-6P 1071532-44-9P 1071532-50-7P
1071532-51-8P 1071532-52-9P 1071532-54-1P
1071532-61-0P 1071532-62-1P 1071532-64-3P
1071532-65-4P 1071532-67-6P 1071532-68-7P
1071532-69-8P 1071532-70-1P 1071532-74-5P
1071532-79-0P 1071532-81-4P 1071532-82-5P
1071532-84-7P 1071532-85-8P 1071532-88-1P
1071532-90-5P 1071532-96-1P 1071532-98-3P
1071533-00-0P 1071533-04-4P 1071533-06-6P
1071533-08-8P 1071533-11-3P 1071533-12-4P
1071533-20-4P 1071533-24-8P 1071533-26-0P
1071533-33-9P 1071533-39-5P 1071533-45-3P
1071533-49-7P 1071533-52-2P 1071533-54-4P
1071533-57-7P 1071533-60-2P 1071533-63-5P
1071533-64-6P 1071533-65-7P 1071533-67-9P
1071533-70-4P 1071533-75-9P 1071533-78-2P
1071533-81-7P 1071533-82-8P 1071533-92-0P
1071533-95-3P 1071534-13-8P 1071534-18-3P
1071534-21-8P 1071534-22-9P 1071534-23-0P
1071534-25-2P 1071534-28-5P 1071534-31-0P
1071534-38-7P 1071534-40-1P 1071534-42-3P
1071534-44-5P 1071534-46-7P 1071534-47-8P
1071534-48-9P 1071534-52-5P 1071534-55-8P
1071534-57-0P 1071534-59-2P 1071534-63-8P
1071534-65-0P 1071534-66-1P 1071534-67-2P
1071534-69-4P 1071534-74-1P 1071534-77-4P
1071534-78-5P 1071534-80-9P 1071534-82-1P
1071534-85-4P 1071534-99-0P 1071535-01-7P
1071535-03-9P 1071535-06-2P 1071535-07-3P
1071535-11-9P 1071535-13-1P 1071535-15-3P
1071535-17-5P 1071535-24-4P 1071535-25-5P
1071535-26-6P 1071535-37-9P 1071535-43-7P
1071535-44-8P 1071535-52-8P 1071535-54-0P
1071535-55-1P 1071535-62-0P 1071535-63-1P
1071535-65-3P 1071535-68-6P 1071535-70-0P
1071535-71-1P 1071535-81-3P 1071535-85-7P
1071535-88-0P 1071535-91-5P 1071535-92-6P
1071535-93-7P 1071536-04-3P 1071536-06-5P
1071536-09-8P 1071536-10-1P 1071536-15-6P
1071536-18-9P 1071536-20-3P 1071536-23-6P
1071536-25-8P 1071536-26-9P 1071536-29-2P
1071536-32-7P 1071536-34-9P 1071536-41-8P
1071536-43-0P 1071536-45-2P 1071536-46-3P
1071536-47-4P 1071536-51-0P 1071536-55-4P
1071536-60-1P 1071536-61-2P 1071536-64-5P
1071536-65-6P 1071536-67-8P 1071536-71-4P
1071536-73-6P 1071536-80-5P 1071536-85-0P
1071536-87-2P 1071536-92-9P 1071536-93-0P
1071536-95-2P 1071536-97-4P 1071537-02-4P
1071537-03-5P 1071537-05-7P 1071537-07-9P
1071537-10-4P 1071537-42-2P 1071537-43-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

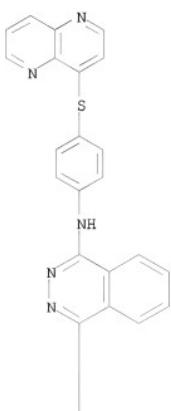
(drug candidate; preparation of phthalazinamine derivs. and related compds. as aurora kinase modulators useful in the treatment of cancer and cancer-related diseases)

RN 1071528-55-6 CAPLUS
CN Benzonitrile, 3-[4-[(4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



RN 1071528-67-0 CAPLUS
CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(1,5-naphthyridin-4-ylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A

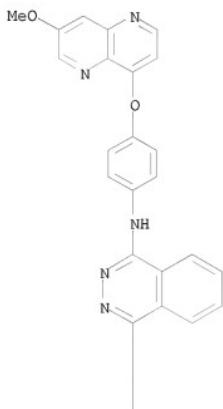


PAGE 2-A



RN 1071528-74-9 CAPLUS
CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-(4-methoxyphenyl)- (CA INDEX NAME)

PAGE 1-A

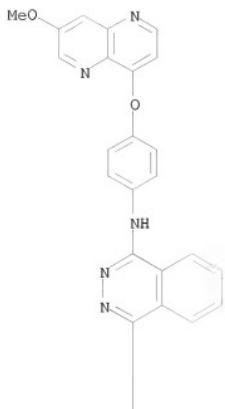


PAGE 2-A



RN 1071528-77-2 CAPLUS
CN 1-Phthalazinamine, 4-[4-(1,1-dimethylethyl)phenyl]-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



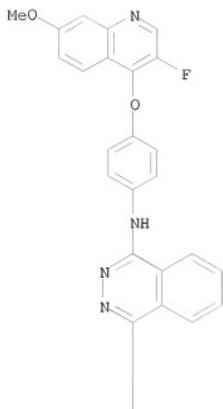
PAGE 2-A



RN 1071528-80-7 CAPLUS

CN 1-Phthalazinamine, N-[4-((3-fluoro-7-methoxy-4-quinolinyl)oxy)phenyl]-4-(trifluoromethyl)phenyl]-(CA INDEX NAME)

PAGE 1-A

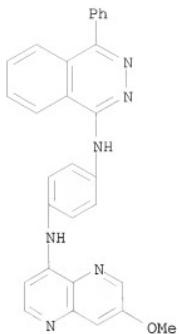


PAGE 2-A



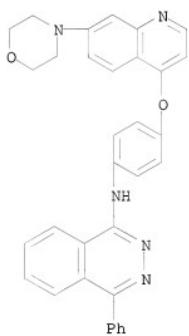
RN 1071528-82-9 CAPLUS

CN 1,4-Benzenediamine, N1-(7-methoxy-1,5-naphthyridin-4-yl)-N4-(4-phenyl-1-phthalazinyl)- (CA INDEX NAME)



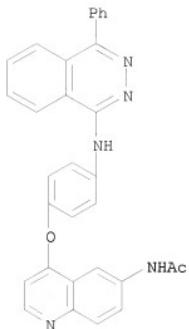
RN 1071528-84-1 CAPLUS

CN 1-Phtalazinamine, N-[4-[(7-(4-morpholinyl)-4-quinolinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



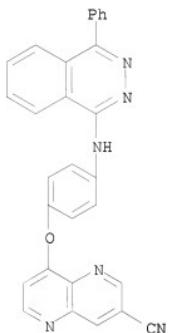
RN 1071528-86-3 CAPLUS

CN Acetanide, N-[4-[(4-phenyl-1-phtalazinyl)amino]phenoxy]-6-quinolinyl- (CA INDEX NAME)



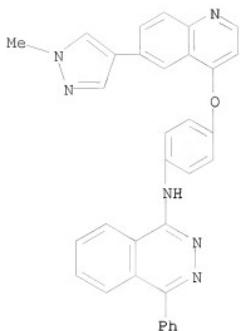
RN 1071528-88-5 CAPLUS

CN 1,5-Naphthyridine-3-carbonitrile, 8-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)



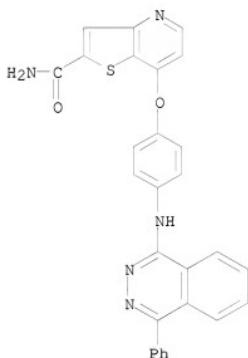
RN 1071528-91-0 CAPLUS

CN 1-Phthalazinamine, N-[4-[(6-(1-methyl-1H-pyrazol-4-yl)-4-quinolinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071528-92-1 CAPLUS

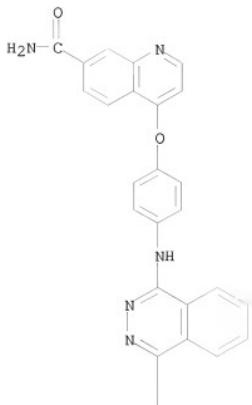
CN Thieno[3,2-b]pyridine-2-carboxamide,
7-[4-(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)



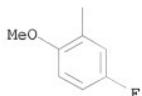
RN 1071528-94-3 CAPLUS

CN 7-Quinolinecarboxamide, 4-[4-[(4-(5-fluoro-2-methoxyphenyl)-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)

PAGE 1-A

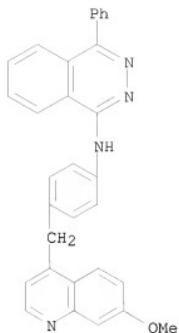


PAGE 2-A



RN 1071528-99-8 CAPLUS

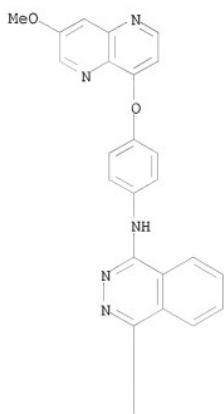
CN 1-Phthalazinamine, N-[4-[(7-methoxy-4-quinolinyl)methyl]phenyl]-4-phenyl-
(CA INDEX NAME)

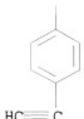


RN 1071529-03-7 CAPLUS

CN 1-Phtalazinamine, 4-((4-ethynylphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

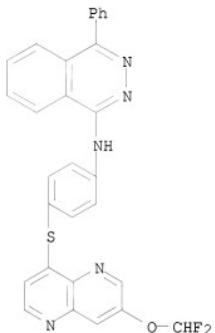
PAGE 1-A





RN 1071529-07-1 CAPLUS

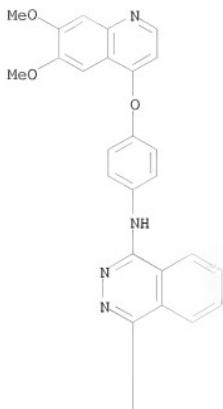
CN 1-Phthalazinamine, N-[4-[(7-(difluoromethoxy)-1,5-naphthyridin-4-yl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



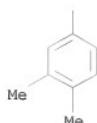
RN 1071529-08-2 CAPLUS

CN 1-Phthalazinamine, N-[4-[(6,7-dimethoxy-4-quinolinyl)oxy]phenyl]-4-(3,4-dimethylphenyl)- (CA INDEX NAME)

PAGE 1-A

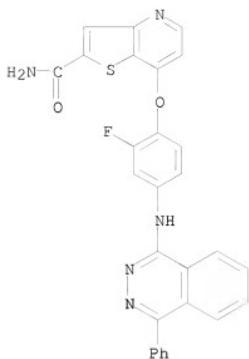


PAGE 2-A



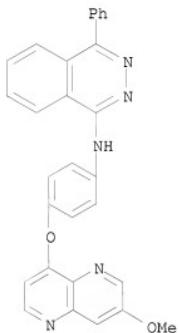
RN 1071529-17-3 CAPLUS

CN Thieno[3,2-b]pyridine-2-carboxamide,
7-[2-fluoro-4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)



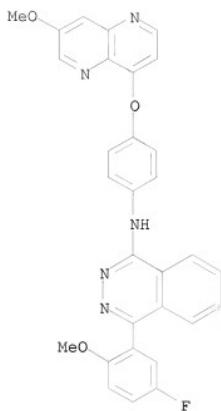
RN 1071529-19-5 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071529-21-9 CAPLUS

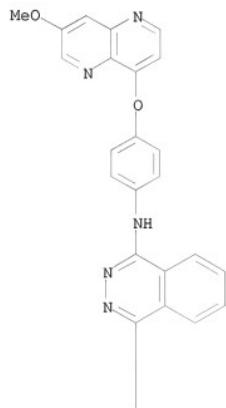
CN 1-Phthalazinamine, 4-(5-fluoro-2-methoxyphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



RN 1071529-24-2 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A

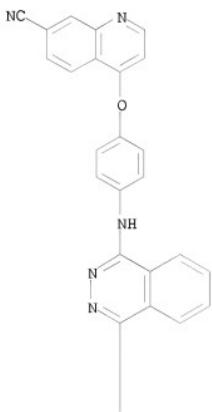


PAGE 2-A



RN 1071529-37-7 CAPLUS
CN 7-Quinolinecarbonitrile, 4-[4-[(4-methyphenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)

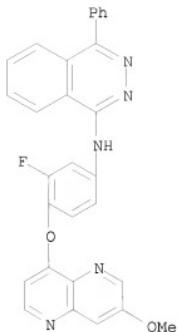
PAGE 1-A



PAGE 2-A

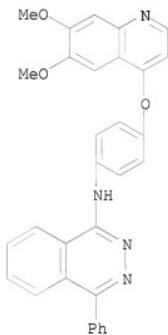


RN 1071529-38-8 CAPLUS
CN 1-Phthalazinamine, N-[3-fluoro-4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



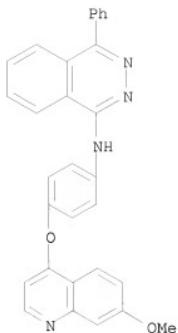
RN 1071529-39-9 CAPLUS

CN 1-Phtalazinamine, N-[4-[(6,7-dimethoxy-4-quinolinyl)oxy]phenyl]-4-phenyl-
(CA INDEX NAME)

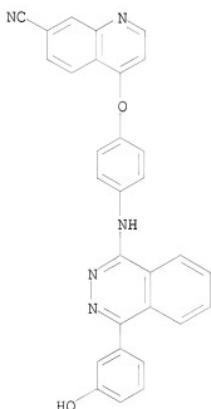


RN 1071529-40-2 CAPLUS

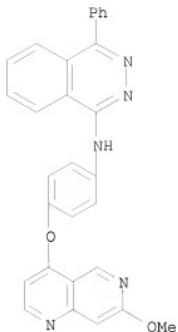
CN 1-Phtalazinamine, N-[4-[(7-methoxy-4-quinolinyl)oxy]phenyl]-4-phenyl-
(CA INDEX NAME)



RN 1071529-42-4 CAPLUS
CN 7-Quinolinecarbonitrile, 4-[4-[(4-(3-hydroxyphenyl)-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)

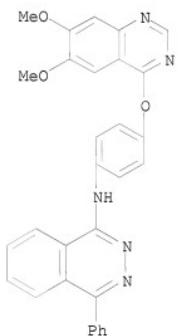


RN 1071529-46-8 CAPLUS
CN 1-Phthalazinamine, N-[4-((7-methoxy-1,6-naphthyridin-4-yl)oxy)phenyl]-4-phenyl- (CA INDEX NAME)



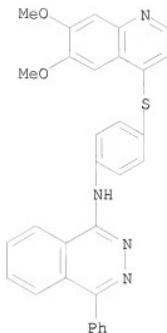
RN 1071529-49-1 CAPLUS

CN 1-Phthalazinamine, N-[4-[(6,7-dimethoxy-4-quinazolinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



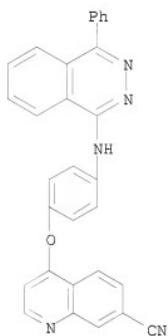
RN 1071529-63-9 CAPLUS

CN 1-Phthalazinamine, N-[4-[(6,7-dimethoxy-4-quinolinyloxy)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071529-66-2 CAPLUS

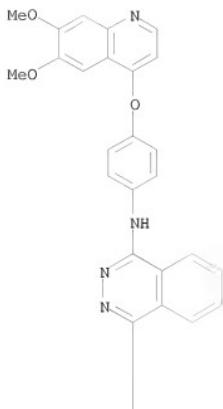
CN 7-Quinolinecarbonitrile, 4-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-
(CA INDEX NAME)



RN 1071529-67-3 CAPLUS

CN 1-Phthalazinamine, N-[4-[(6,7-dimethoxy-4-quinolinyl)oxy]phenyl]-4-[4-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

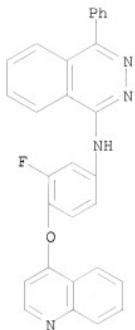


PAGE 2-A



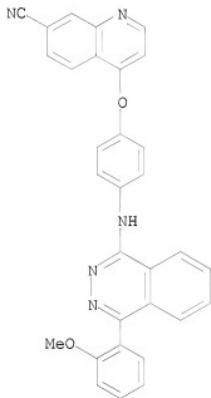
RN 1071529-80-0 CAPLUS

CN 1-Phthalazinamine, N-[3-fluoro-4-(4-quinolinyloxy)phenyl]-4-phenyl- (CA INDEX NAME)



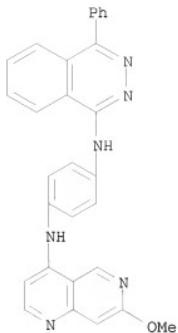
RN 1071529-89-9 CAPLUS

CN 7-Quolinicarbonitrile, 4-[(4-[(2-methoxyphenyl)-1-phthalazinyl]amino)phenoxy]- (CA INDEX NAME)



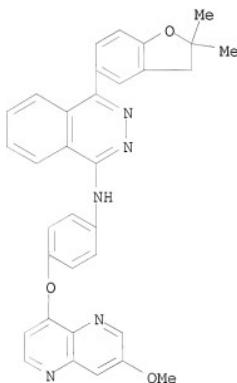
RN 1071530-00-1 CAPLUS

CN 1,4-Benzenediamine, N1-(7-methoxy-1,6-naphthyridin-4-yl)-N4-(4-phenyl-1-phthalazinyl)- (CA INDEX NAME)



RN 1071530-30-7 CAPLUS

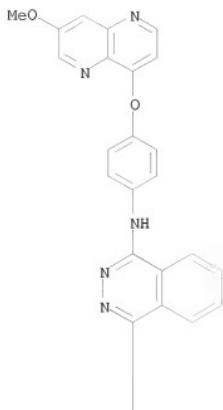
CN 1-Phtalazinamine, 4-(2,3-dihydro-2,2-dimethyl-5-benzofuranyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



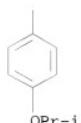
RN 1071530-33-0 CAPLUS

CN 1-Phtalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-[(1-methylethoxy)phenyl]- (CA INDEX NAME)

PAGE 1-A

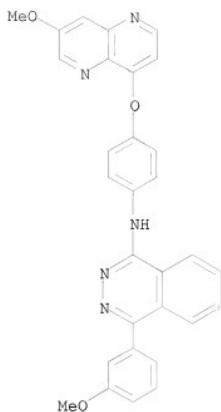


PAGE 2-A



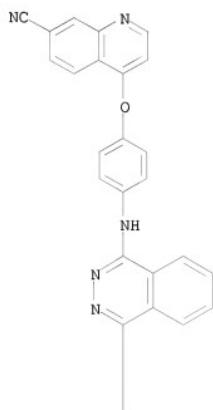
RN 1071530-37-4 CAPLUS

CN 1-Phthalazinamine, N-[4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl]-4-(3-methoxyphenyl)- (CA INDEX NAME)



RN 1071530-41-0 CAPLUS
CN 7-Quinolinecarbonitrile, 4-[4-[(4-methoxyphenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)

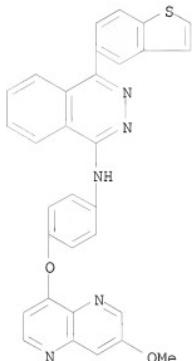
PAGE 1-A





RN 1071530-43-2 CAPLUS

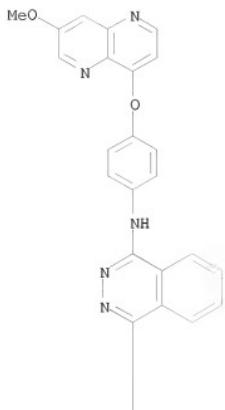
CN 1-Phthalazinamine, 4-benzo[b]thien-5-yl-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



RN 1071530-49-8 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

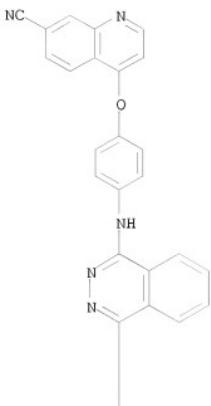


PAGE 2-A



RN 1071530-50-1 CAPLUS
CN 7-Quinolinecarbonitrile, 4-[4-[(4-(trifluoromethyl)phenyl)-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)

PAGE 1-A



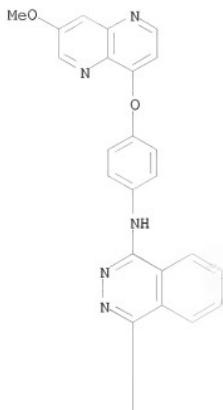
PAGE 2-A



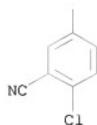
RN 1071530-62-5 CAPLUS

CN Benzonitrile, 2-chloro-5-[4-[(4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A



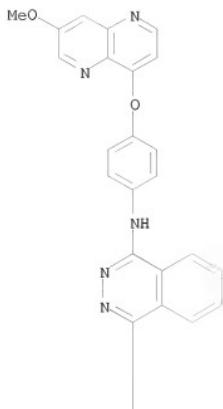
PAGE 2-A



RN 1071530-64-7 CAPLUS

CN 1-Phthalazinamine, N-[4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl]-4-(1-methylethyl)phenyl]- (CA INDEX NAME)

PAGE 1-A



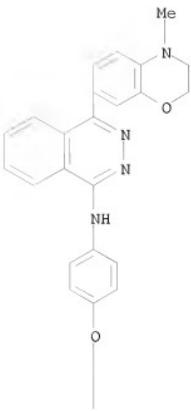
PAGE 2-A



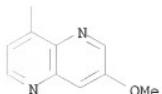
RN 1071530-70-5 CAPLUS

CN 1-Phtalazinamine, 4-(3,4-dihydro-4-methyl-2H-1,4-benzoxazin-7-yl)-N-(4-[(7-methoxy-1,5-naphthyridin-4-yl)oxyl]phenyl)- (CA INDEX NAME)

PAGE 1-A

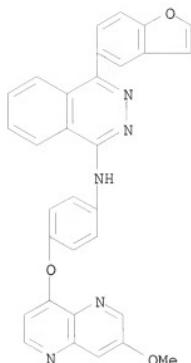


PAGE 2-A



RN 1071530-79-4 CAPLUS

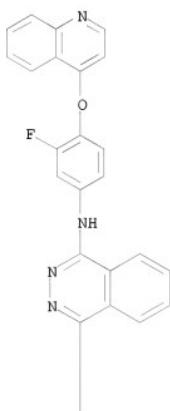
CN 1-Phthalazinamine, 4-(5-benzofuranyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



RN 1071530-86-3 CAPLUS

CN 1-Phtalazinamine, N-[3-fluoro-4-(4-quinolinyloxy)phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A

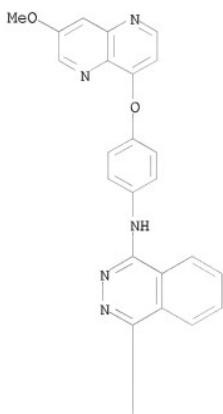


PAGE 2-A

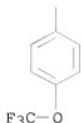


RN 1071530-90-9 CAPLUS
CN 1-Phtalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxyl]phenyl]-4-[(trifluoromethoxy)phenyl]- (CA INDEX NAME)

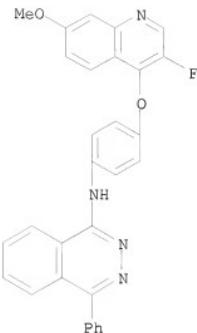
PAGE 1-A



PAGE 2-A

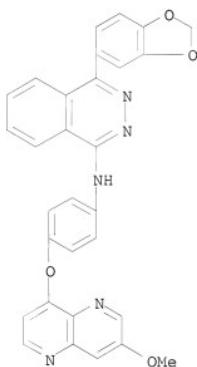


RN 1071530-92-1 CAPLUS
CN 1-Phtalazinamine, N-[4-[(3-fluoro-7-methoxy-4-quinolinyl)oxyl]phenyl]-4-phenyl- (CA INDEX NAME)



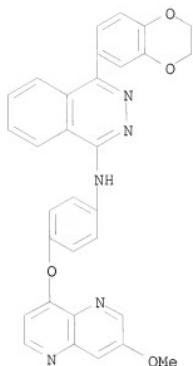
RN 1071530-94-3 CAPLUS

CN 1-Phtalazinamine, 4-(1,3-benzodioxol-5-yl)-N-[4-[(7-methoxy-1,5-dihydro-1,3-benzodioxol-5-yl)oxy]phenyl]- (CA INDEX NAME)



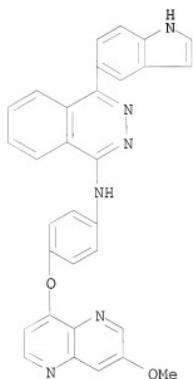
RN 1071530-96-5 CAPLUS

CN 1-Phtalazinamine, 4-(2,3-dihydro-1,4-benzodioxin-6-yl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



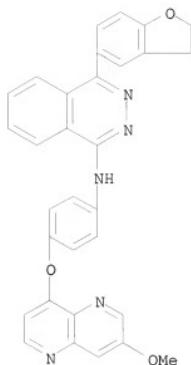
RN 1071530-98-7 CAPLUS

CN 1-Phthalazinamine, 4-(1H-indol-5-yl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



RN 1071531-00-4 CAPLUS

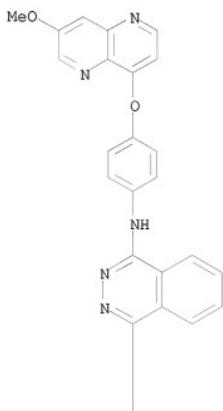
CN 1-Phthalazinamine, 4-(2,3-dihydro-5-benzofuranyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



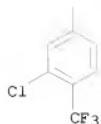
RN 1071531-11-7 CAPLUS

CN 1-Pthalazinamine, 4-[3-chloro-4-(trifluoromethyl)phenyl]-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

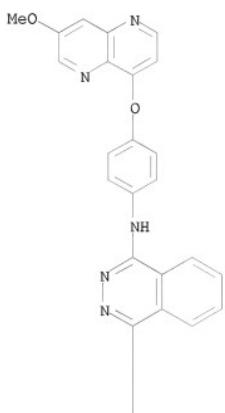


PAGE 2-A

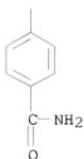


RN 1071531-26-4 CAPLUS
CN Benzamide, 4-[4-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]amino]-1-phthalazinyl- (CA INDEX NAME)

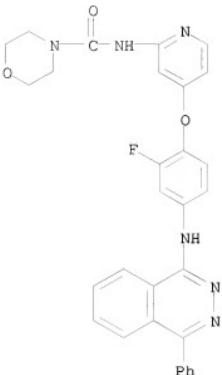
PAGE 1-A



PAGE 2-A



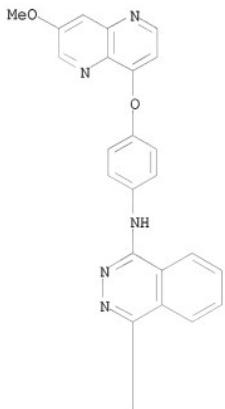
RN 1071531-32-2 CAPLUS
CN 4-Morpholinecarboxamide, N-[4-[2-fluoro-4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-2-pyridinyl]- (CA INDEX NAME)



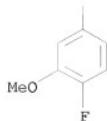
RN 1071531-36-6 CAPLUS

CN 1-Pthalazinamine, 4-(4-fluoro-3-methoxyphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxyl]phenyl]- (CA INDEX NAME)

PAGE 1-A

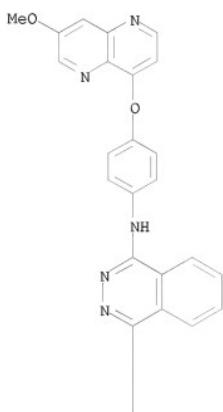


PAGE 2-A



RN 1071531-40-2 CAPLUS
CN Benzonitrile, 4-[4-[(4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

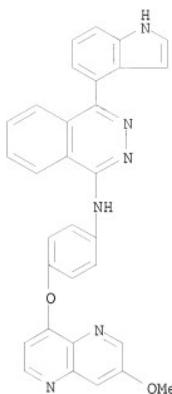
PAGE 1-A



PAGE 2-A

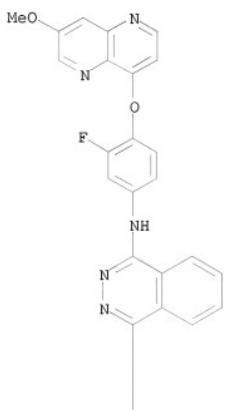


RN 1071531-46-8 CAPLUS
CN 1-Phthalazinamine, 4-(1H-indol-4-yl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



RN 1071531-58-2 CAPLUS
CN 1-Phthalazinamine, N-[3-fluoro-4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A



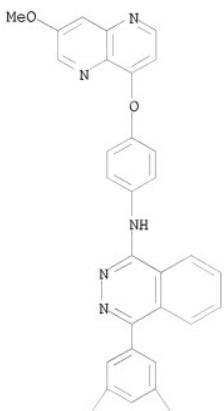
PAGE 2-A



RN 1071531-61-7 CAPLUS

CN 1-Phthalazinamine, 4-(3,5-dimethylphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



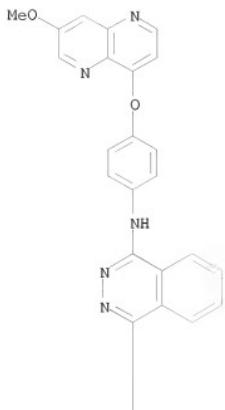
PAGE 2-A



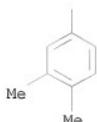
RN 1071531-70-8 CAPLUS

CN 1-Phthalazinamine, 4-(3,4-dimethylphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



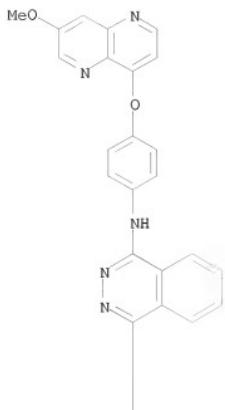
PAGE 2-A



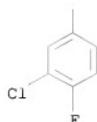
RN 1071531-71-9 CAPLUS

CN 1-Phthalazinamine, 4-(3-chloro-4-fluorophenyl)-N-(4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl)- (CA INDEX NAME)

PAGE 1-A



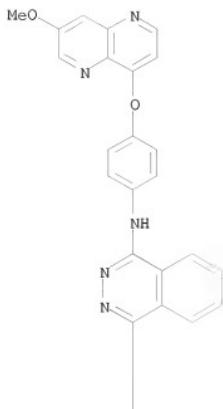
PAGE 2-A



RN 1071531-74-2 CAPLUS

CN 1-Phthalazinamine, 4-[4-(dimethylamino)phenyl]-N-(4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl)- (CA INDEX NAME)

PAGE 1-A

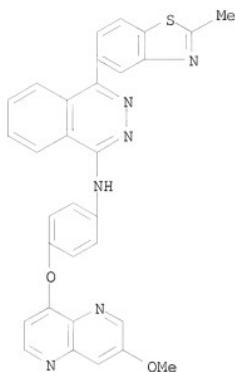


PAGE 2-A



RN 1071531-75-3 CAPLUS

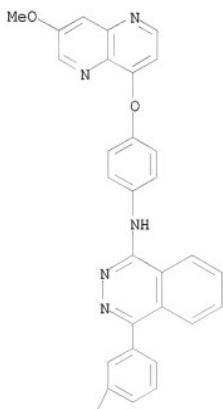
CN 1-Phthalazinamine, N-(4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl)-4-(2-methyl-5-benzothiazolyl)- (CA INDEX NAME)



RN 1071531-77-5 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-[3-(1-piperidinyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

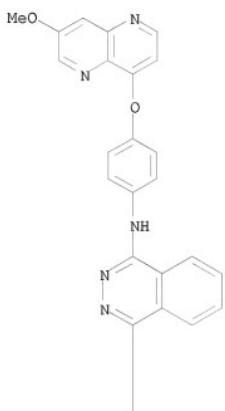


PAGE 2-A



RN 1071531-79-7 CAPLUS
CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-(1-piperidinyl)phenyl- (CA INDEX NAME)

PAGE 1-A

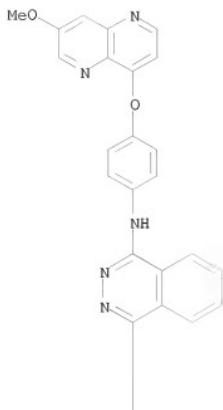


PAGE 2-A

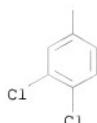


RN 1071531-88-8 CAPLUS
CN 1-Phthalazinamine, 4-(3,4-dichlorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

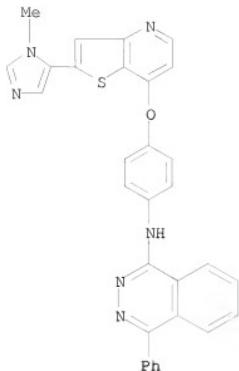


PAGE 2-A



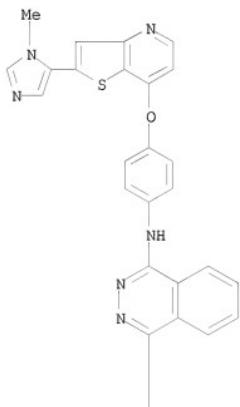
RN 1071531-90-2 CAPLUS

CN 1-Phthalazinamine, N-[4-[(2-(1-methyl-1H-imidazol-5-yl)thieno[3,2-b]pyridin-7-yl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071531-93-5 CAPLUS
CN 1-Phthalazinamine, N-[4-[(2-(1-methyl-1H-imidazol-5-yl)thieno[3,2-b]pyridin-7-yl)oxy]phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A

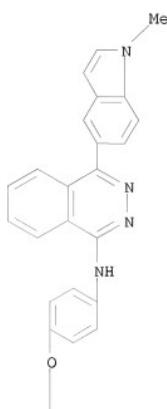


PAGE 2-A

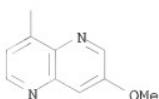


RN 1071531-97-9 CAPLUS
CN 1-Phtalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-(1-methyl-1H-indol-5-yl)- (CA INDEX NAME)

PAGE 1-A

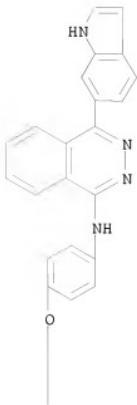


PAGE 2-A

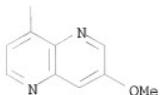


RN 1071532-01-8 CAPLUS
CN 1-Phtalazinamine, 4-(1H-indol-6-yl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

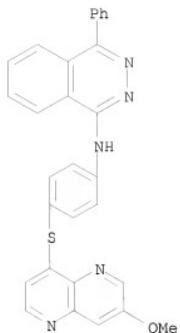


PAGE 2-A



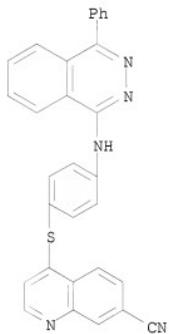
RN 1071532-02-9 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071532-04-1 CAPLUS

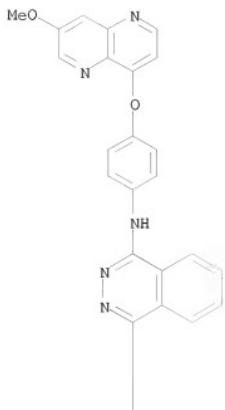
CN 7-Quinolinecarbonitrile, 4-[(4-[(4-phenyl-1-phthalazinyl)amino]phenyl)thio]- (CA INDEX NAME)



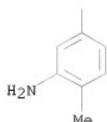
RN 1071532-05-2 CAPLUS

CN 1-Phthalazinamine, 4-(3-amino-4-methylphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



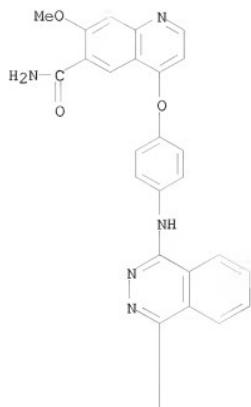
PAGE 2-A



RN 1071532-10-9 CAPLUS

CN 6-Quinolinecarboxamide, 7-methoxy-4-[4-[(4-methylphenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)

PAGE 1-A



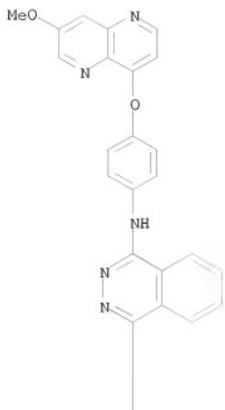
PAGE 2-A



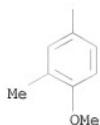
RN 1071532-14-3 CAPLUS

CN 1-Phthalazinamine, 4-((4-methoxy-3-methylphenyl)-N-[4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



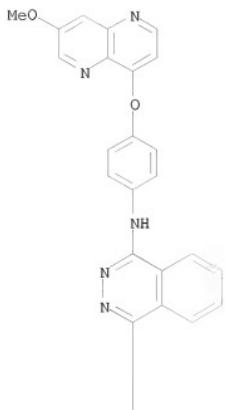
PAGE 2-A



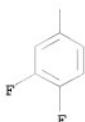
RN 1071532-17-6 CAPLUS

CN 1-Phtalazinamine, 4-(3,4-difluorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

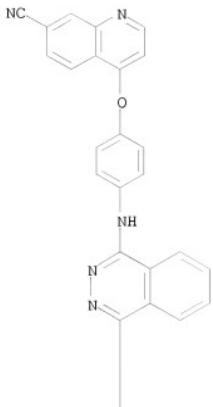


PAGE 2-A



RN 1071532-24-5 CAPLUS
CN 7-Quinolinecarbonitrile, 4-[4-[(4-(4-cyanophenyl)-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)

PAGE 1-A



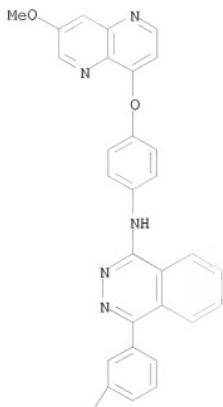
PAGE 2-A



RN 1071532-28-9 CAPLUS

CN 1-Phthalazinamine, 4-(3-chlorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



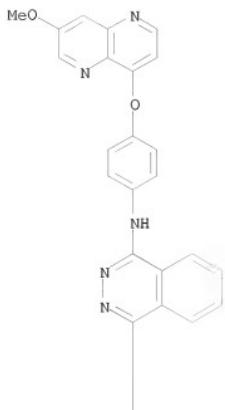
PAGE 2-A

C1

RN 1071532-29-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

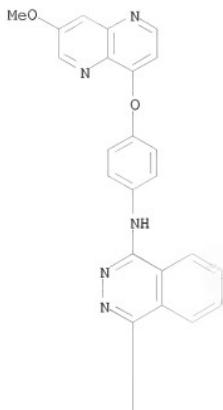


PAGE 2-A



RN 1071532-32-5 CAPLUS
CN 1-Phthalazinamine, 4-(4-ethylphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



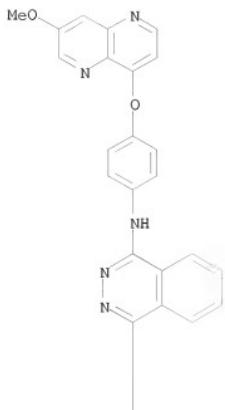
PAGE 2-A



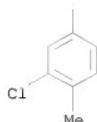
RN 1071532-38-1 CAPLUS

CN 1-Phthalazinamine, 4-(3-chloro-4-methylphenyl)-N-(4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl)- (CA INDEX NAME)

PAGE 1-A



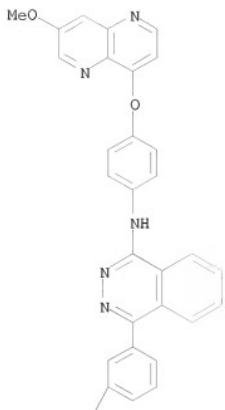
PAGE 2-A



RN 1071532-41-6 CAPLUS

CN Benzanide, 3-[4-[(4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl)amino]-1-phthalazinyl]-N,N-dimethyl- (CA INDEX NAME)

PAGE 1-A



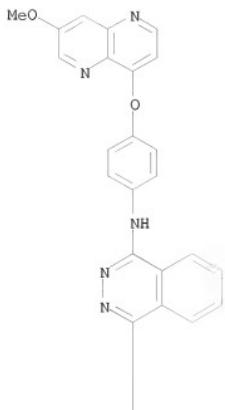
PAGE 2-A



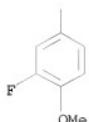
RN 1071532-44-9 CAPLUS

CN 1-Phtalazinamine, 4-(3-fluoro-4-methoxyphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

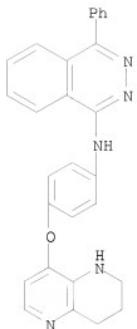


PAGE 2-A



RN 1071532-50-7 CAPLUS

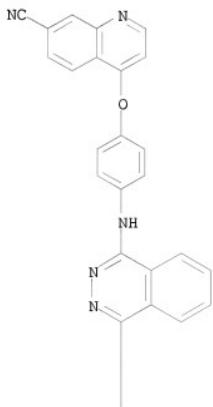
CN 1-Phthalazinamine, 4-phenyl-N-[4-[(5,6,7,8-tetrahydro-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



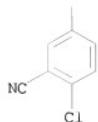
RN 1071532-51-8 CAPLUS

CN 7-Quinolinecarbonitrile, 4-[(4-[(4-chloro-3-cyanophenyl)-1-phthalazinyl]amino)phenoxy]- (CA INDEX NAME)

PAGE 1-A



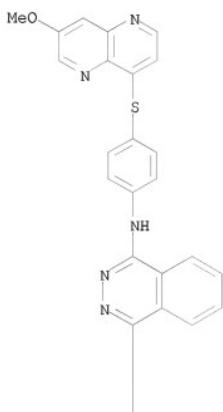
PAGE 2-A



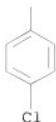
RN 1071532-52-9 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A



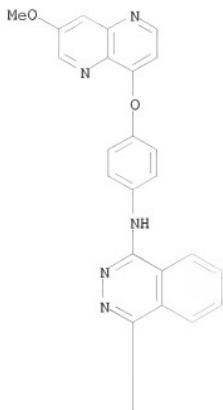
PAGE 2-A



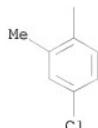
RN 1071532-54-1 CAPLUS

CN 1-Phtalazinamine, 4-(4-chloro-2-methylphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



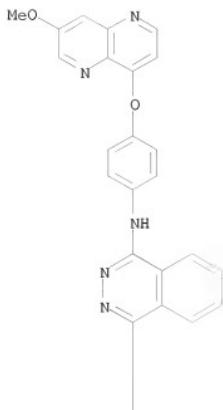
PAGE 2-A



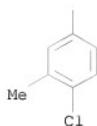
RN 1071532-61-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-chloro-3-methylphenyl)-N-(4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl)- (CA INDEX NAME)

PAGE 1-A



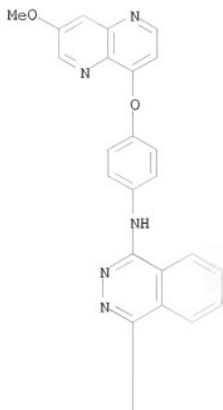
PAGE 2-A



RN 1071532-62-1 CAPLUS

CN 1-Phthalazinamine, N-[4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl]-4-(methylthio)phenyl- (CA INDEX NAME)

PAGE 1-A

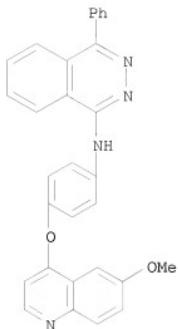


PAGE 2-A



RN 1071532-64-3 CAPLUS

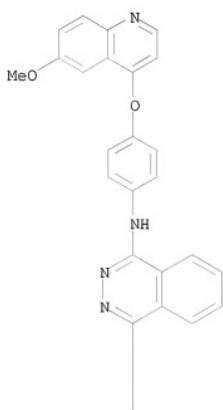
CN 1-Phthalazinamine, N-[4-((6-methoxy-4-quinolinyl)oxy)phenyl]-4-phenyl-
(CA INDEX NAME)



RN 1071532-65-4 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[6-methoxy-4-quinolinyl]oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

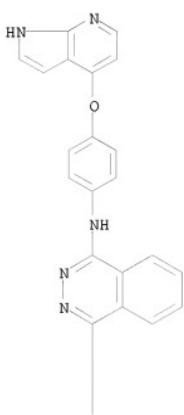


PAGE 2-A



RN 1071532-67-6 CAPLUS
CN 1-Pthalazinamine, 4-(4-chlorophenyl)-N-[4-(1H-pyrrolo[2,3-b]pyridin-4-yloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A

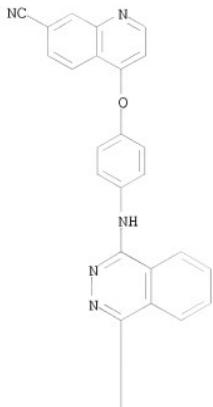


PAGE 2-A



RN 1071532-68-7 CAPLUS
CN 7-Quinolinecarbonitrile, 4-[4-[(4-(4-chlorophenyl)-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)

PAGE 1-A



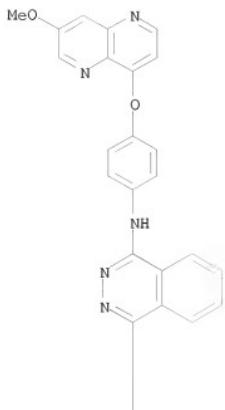
PAGE 2-A



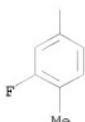
RN 1071532-69-8 CAPLUS

CN 1-Phtalazinamine, 4-(3-fluoro-4-methylphenyl)-N-(4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl)- (CA INDEX NAME)

PAGE 1-A



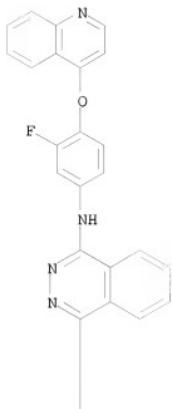
PAGE 2-A



RN 1071532-70-1 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[3-fluoro-4-(4-quinolinylloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



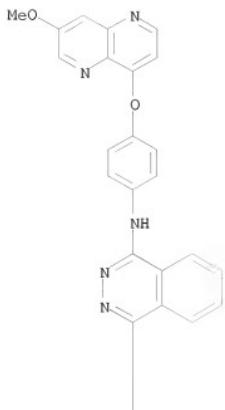
PAGE 2-A



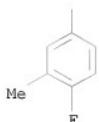
RN 1071532-74-5 CAPLUS

CN 1-Phtalazinamine, 4-(4-fluoro-3-methylphenyl)-N-(4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl)- (CA INDEX NAME)

PAGE 1-A

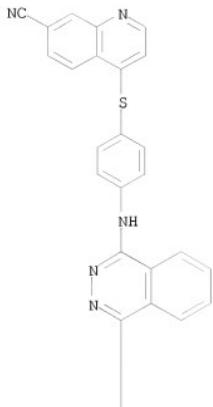


PAGE 2-A



RN 1071532-79-0 CAPLUS
CN 7-Quinolinecarbonitrile, 4-[(4-[(4-chlorophenyl)-1-phthalazinyl]amino)phenyl]thio- (CA INDEX NAME)

PAGE 1-A

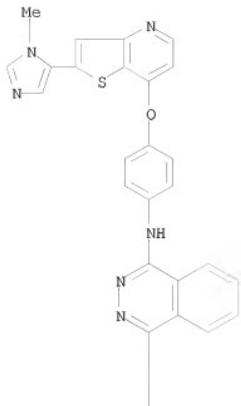


PAGE 2-A



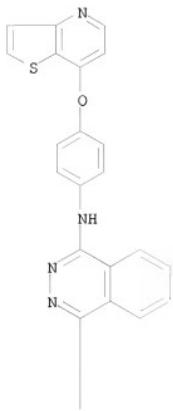
RN 1071532-81-4 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(2-(1-methyl-1H-imidazol-5-yl)thieno[3,2-b]pyridin-7-yl)oxy]phenyl]- (CA INDEX NAME)



RN 1071532-82-5 CAPLUS
CN 1-Phthalaminamine, 4-(4-chlorophenyl)-N-[4-(thieno[3,2-b]pyridin-7-yl)phenyl]- (CA INDEX NAME)

PAGE 1-A

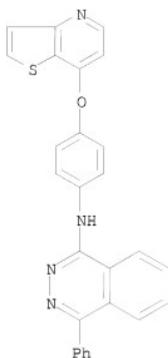


PAGE 2-A



RN 1071532-84-7 CAPLUS

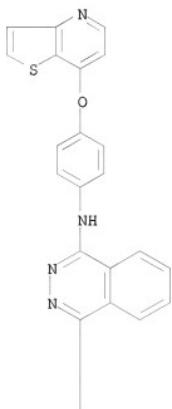
CN 1-Phthalazinamine, 4-phenyl-N-(4-(thieno[3,2-b]pyridin-7-yloxy)phenyl)-
(CA INDEX NAME)



RN 1071532-85-8 CAPLUS

CN 1-Phthalazinamine, 4-(4-methylphenyl)-N-[4-(thieno[3,2-b]pyridin-7-yloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



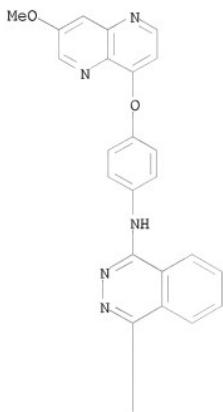
PAGE 2-A



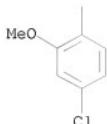
RN 1071532-88-1 CAPLUS

CN 1-Phthalazinamine, 4-(4-chloro-2-methoxyphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

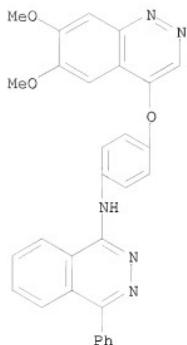


PAGE 2-A



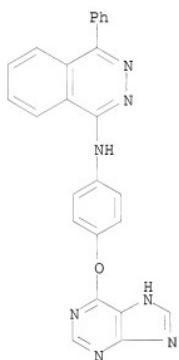
RN 1071532-90-5 CAPLUS

CN 1-Phthalazinamine, N-[4-[(6,7-dimethoxy-4-cinnolinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071532-96-1 CAPLUS

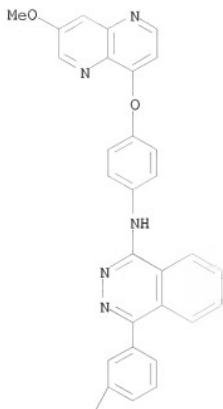
CN 1-Phthalazinamine, 4-phenyl-N-[4-(9H-purin-6-yloxy)phenyl]- (CA INDEX NAME)



RN 1071532-98-3 CAPLUS

CN 1-Phthalazinamine, 4-[3-(dimethylamino)phenyl]-N-[4-[(7-methoxy-1,5-naphthyridin-4-yloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A

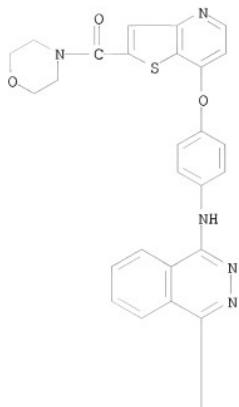


PAGE 2-A

Me₂N

RN 1071533-00-0 CAPLUS
CN Methanone, [7-[4-[4-(4-chlorophenyl)-1-phthalazinyl]amino]phenoxy]thieno[3,2-b]pyridin-2-yl]-4-morpholinyl- (CA INDEX NAME)

PAGE 1-A



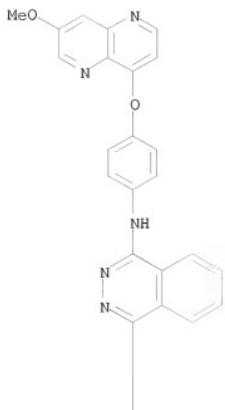
PAGE 2-A



RN 1071533-04-4 CAPLUS

CN 1-Phthalazinamine, N-[4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl]-4-(4-(methylsulfinyl)phenyl]- (CA INDEX NAME)

PAGE 1-A



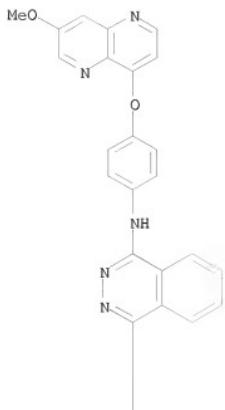
PAGE 2-A



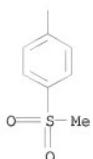
RN 1071533-06-6 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-(methylsulfonyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

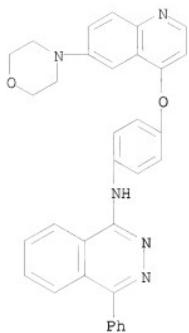


PAGE 2-A



RN 1071533-08-8 CAPLUS

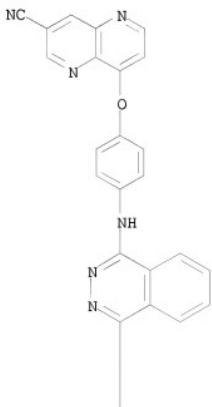
CN 1-Phthalazinamine, N-[4-[(6-(4-morpholinyl)-4-quinolinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071533-11-3 CAPLUS

CN 1,5-Naphthyridine-3-carbonitrile, 8-[4-[(4-chlorophenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)

PAGE 1-A

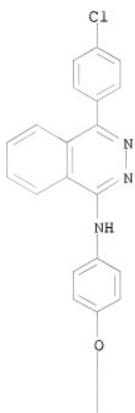


PAGE 2-A

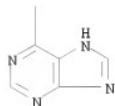


RN 1071533-12-4 CAPLUS
CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-(9H-purin-6-yloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A

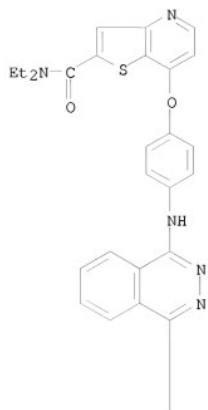


PAGE 2-A



RN 1071533-20-4 CAPLUS
CN Thieno[3,2-b]pyridine-2-carboxamide,
7-[4-[(4-chlorophenyl)-1-phthalazinyl]amino]phenoxy]-N,N-diethyl- (CA INDEX NAME)

PAGE 1-A



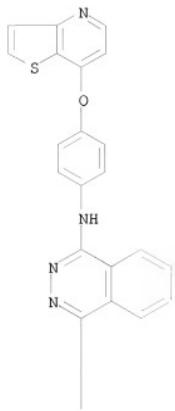
PAGE 2-A



RN 1071533-24-8 CAPLUS

CN 1-Phthalazinamine, 4-(2,3-dihydro-5-benzofuranyl)-N-(4-(thieno[3,2-b]pyridin-7-yloxy)phenyl)- (CA INDEX NAME)

PAGE 1-A

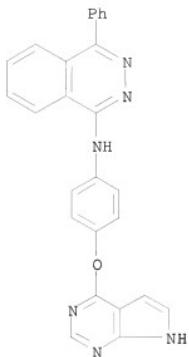


PAGE 2-A



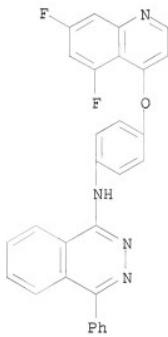
RN 1071533-26-0 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-(7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)phenyl]- (CA INDEX NAME)



RN 1071533-33-9 CAPLUS

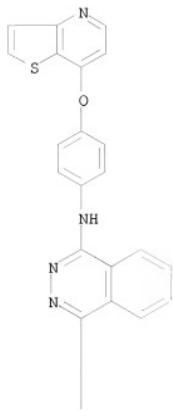
CN 1-Phthalazinamine, N-[4-[(5,7-difluoro-4-quinolinyl)oxy]phenyl]-4-phenyl-
(CA INDEX NAME)



RN 1071533-39-5 CAPLUS

CN 1-Phthalazinamine, 4-(1,3-benzodioxol-5-yl)-N-[4-(thieno[3,2-b]pyridin-7-yloxy)phenyl]-
(CA INDEX NAME)

PAGE 1-A



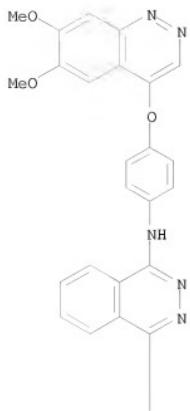
PAGE 2-A



RN 1071533-45-3 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(6,7-dimethoxy-4-cinnolinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



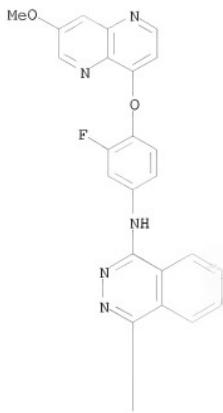
PAGE 2-A



RN 1071533-49-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[3-fluoro-4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

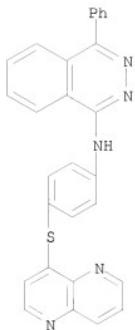


PAGE 2-A



RN 1071533-52-2 CAPLUS

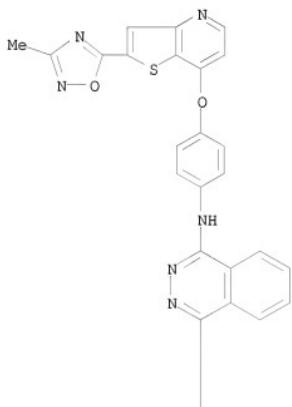
CN 1-Phthalazinamine, N-[4-(1,5-naphthyridin-4-ylthio)phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071533-54-4 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(2-(3-methyl-1,2,4-oxadiazol-5-yl)thieno[3,2-b]pyridin-7-yl)oxy]phenyl]- (CA INDEX NAME)

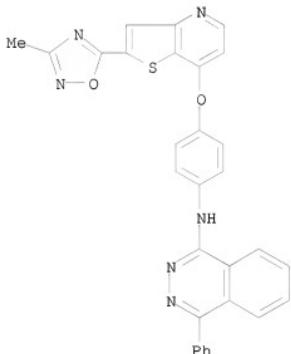
PAGE 1-A





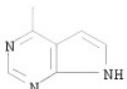
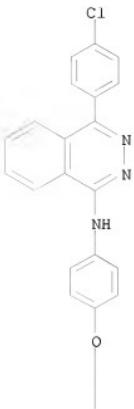
RN 1071533-57-7 CAPLUS

CN 1-Phthalazinamine, N-[4-[(2-(3-methyl-1,2,4-oxadiazol-5-yl)thieno[3,2-b]pyridin-7-yl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



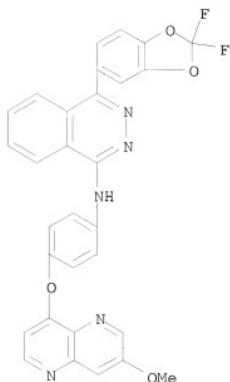
RN 1071533-60-2 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)phenyl]- (CA INDEX NAME)



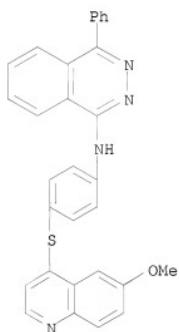
RN 1071533-63-5 CAPLUS

CN 1-Phthalazinamine, 4-(2,2-difluoro-1,3-benzodioxol-5-yl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxyl]phenyl]- (CA INDEX NAME)



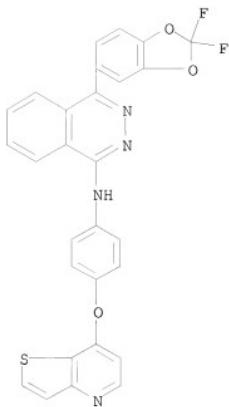
RN 1071533-64-6 CAPLUS

CN 1-Phthalazinamine, N-[4-[(6-methoxy-4-quinolinyl)thio]phenyl]-4-phenyl-
(CA INDEX NAME)



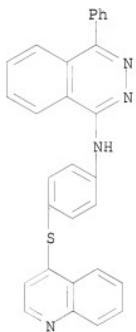
RN 1071533-65-7 CAPLUS

CN 1-Phthalazinamine, 4-(2,2-difluoro-1,3-benzodioxol-5-yl)-N-[4-(thieno[3,2-b]pyridin-7-yloxy)phenyl]-
(CA INDEX NAME)



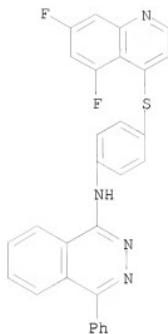
RN 1071533-67-9 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-(4-quinolinylthio)phenyl]- (CA INDEX NAME)



RN 1071533-70-4 CAPLUS

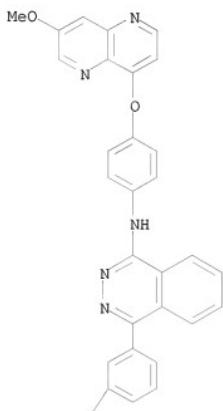
CN 1-Phthalazinamine, N-[4-[(5,7-difluoro-4-quinolinyl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071533-75-9 CAPLUS

CN 1-Phtalazinamine, N-[4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl]-4-(3-methylphenyl)- (CA INDEX NAME)

PAGE 1-A



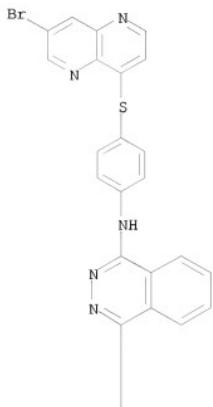
PAGE 2-A



RN 1071533-78-2 CAPLUS

CN 1-Phtalazinamine, N-[4-[(7-bromo-1,5-naphthyridin-4-yl)thiophenyl]-4-(4-chlorophenyl)- (CA INDEX NAME)

PAGE 1-A

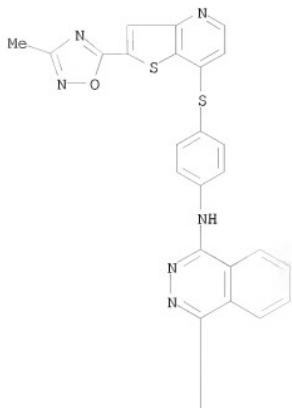


PAGE 2-A



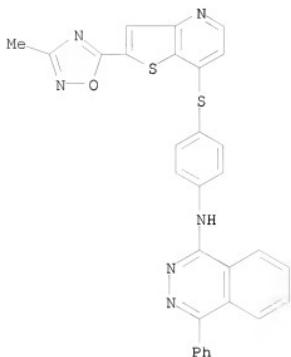
RN 1071533-81-7 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[[2-(3-methyl-1,2,4-oxadiazol-5-yl)thieno[3,2-b]pyridin-7-yl]thiophenyl]- (CA INDEX NAME)



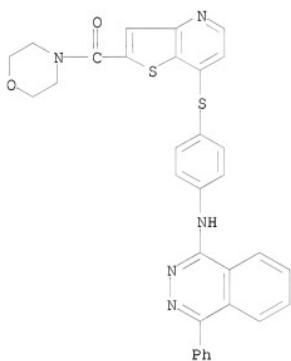
RN 1071533-82-8 CAPLUS

CN 1-Phthalazinamine, N-[4-[(2-(3-methyl-1,2,4-oxadiazol-5-yl)thieno[3,2-b]pyridin-7-yl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071533-92-0 CAPLUS

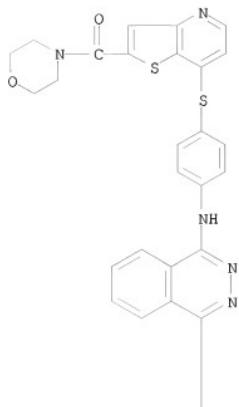
CN Methanone, 4-morpholinyl[7-[(4-[(4-phenyl-1-phthalazinyl)amino]phenyl)thio]thieno[3,2-b]pyridin-2-yl]- (CA INDEX NAME)



RN 1071533-95-3 CAPLUS

CN Methanone, [7-[(4-[(4-(4-chlorophenyl)-1-phthalazinyl)amino]phenyl)thio]thieno[3,2-b]pyridin-2-yl]-4-morpholinyl- (CA INDEX NAME)

PAGE 1-A

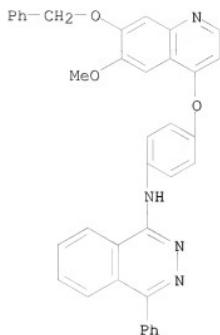


PAGE 2-A



RN 1071534-13-8 CAPLUS

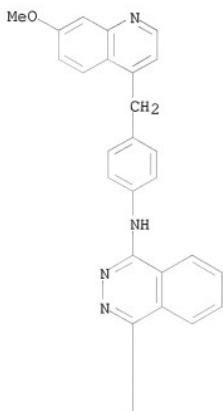
CN 1-Phthalazinamine, N-[4-[(6-methoxy-7-(phenylmethoxy)-4-quinolinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071534-18-3 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-methoxy-4-quinolinyl)methyl]phenyl]- (CA INDEX NAME)

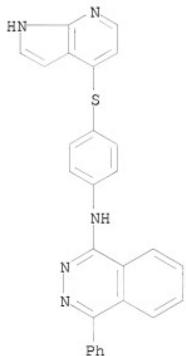
PAGE 1-A





RN 1071534-21-8 CAPLUS

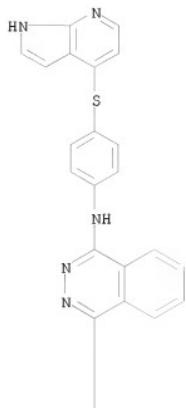
CN 1-Phthalazinamine, 4-phenyl-N-[4-(1H-pyrrolo[2,3-b]pyridin-4-ylthio)phenyl]- (CA INDEX NAME)



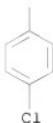
RN 1071534-22-9 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(1H-pyrrolo[2,3-b]pyridin-4-ylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A

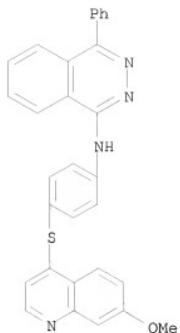


PAGE 2-A



RN 1071534-23-0 CAPLUS

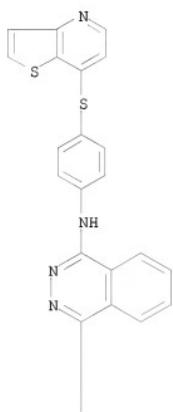
CN 1-Phthalazinamine, N-[4-((7-methoxy-4-quinolinyl)thio)phenyl]-4-phenyl-
(CA INDEX NAME)



RN 1071534-25-2 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-(thieno[3,2-b]pyridin-7-ylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A

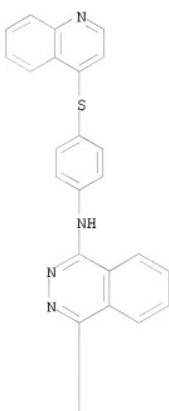


PAGE 2-A



RN 1071534-28-5 CAPLUS
CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(4-quinolinylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A

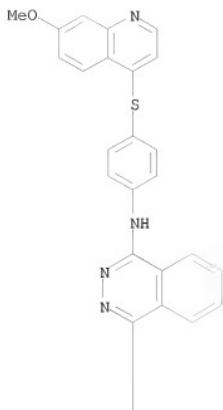


PAGE 2-A



RN 1071534-31-0 CAPLUS
CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[4-(7-methoxy-4-quinolinyl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

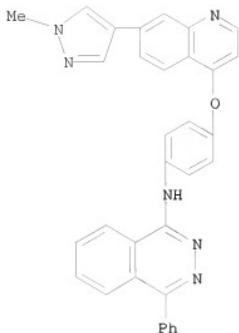


PAGE 2-A



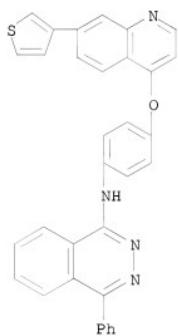
RN 1071534-38-7 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-(1-methyl-1H-pyrazol-4-yl)-4-quinolinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



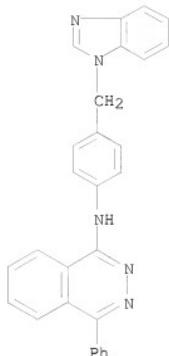
RN 1071534-40-1 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-[(7-(3-thienyl)-4-quinolinyl)oxy]phenyl]-
(CA INDEX NAME)



RN 1071534-42-3 CAPLUS

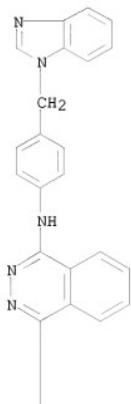
CN 1-Phthalazinamine, N-[4-(1H-benzimidazol-1-ylmethyl)phenyl]-4-phenyl-
(CA INDEX NAME)



RN 1071534-44-5 CAPLUS

CN 1-Phthalazinamine, N-[4-(1H-benzimidazol-1-ylmethyl)phenyl]-4-(4-chlorophenyl)- (CA INDEX NAME)

PAGE 1-A



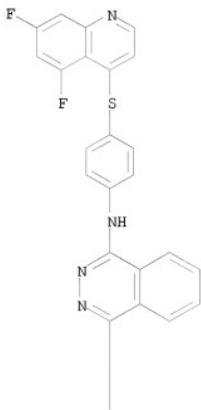
PAGE 2-A



RN 1071534-46-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(5,7-difluoro-4-quinolinyl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

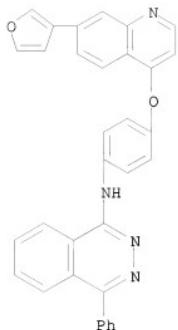


PAGE 2-A



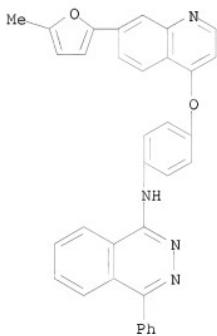
RN 1071534-47-8 CAPLUS

CN 1-Phthalazinamine, N-[4-[[7-(3-furanyl)-4-quinolinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071534-48-9 CAPLUS

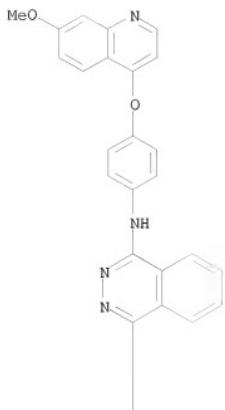
CN 1-Phtalazinamine, N-[4-[(7-(5-methyl-2-furyl)-4-quinolinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071534-52-5 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-methoxy-4-quinolinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

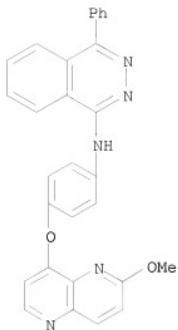


PAGE 2-A



RN 1071534-55-8 CAPLUS

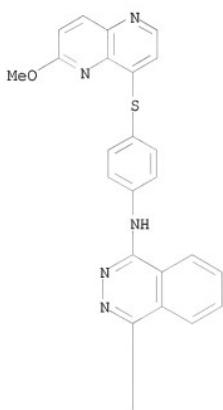
CN 1-Phthalazinamine, N-(4-((6-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl)-4-phenyl- (CA INDEX NAME)



RN 1071534-57-0 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(6-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

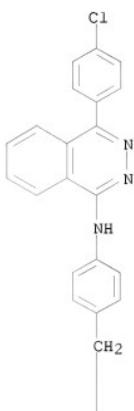


PAGE 2-A

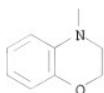


RN 1071534-59-2 CAPLUS
CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(2,3-dihydro-4H-1,4-benzoxazin-4-yl)methyl]phenyl]- (CA INDEX NAME)

PAGE 1-A

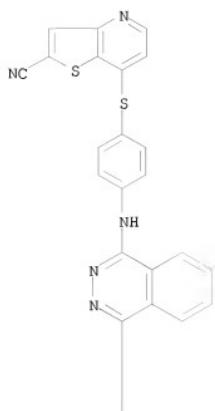


PAGE 2-A



RN 1071534-63-8 CAPLUS
CN Thieno[3,2-b]pyridine-2-carbonitrile,
7-[[4-[(4-chlorophenyl)-1-phthalazinyl]amino]phenyl]thio- (CA INDEX NAME)

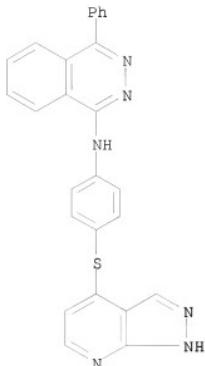
PAGE 1-A



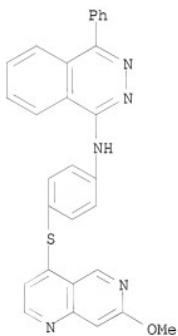
PAGE 2-A



RN 1071534-65-0 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[4-(1H-pyrazolo[3,4-b]pyridin-4-ylthio)phenyl]- (CA INDEX NAME)

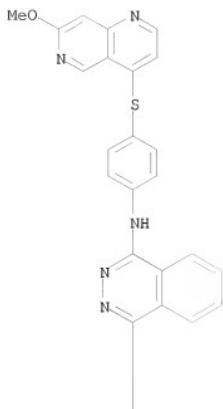


RN 1071534-66-1 CAPLUS
CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,6-naphthyridin-4-yl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071534-67-2 CAPLUS
CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-methoxy-1,6-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

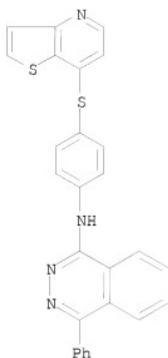


PAGE 2-A



RN 1071534-69-4 CAPLUS

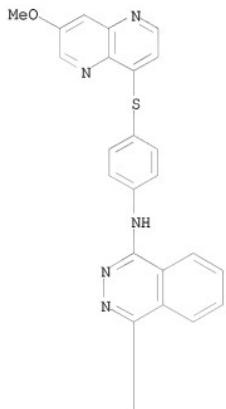
CN 1-Phthalazinamine, 4-phenyl-N-[4-(thieno[3,2-b]pyridin-7-ylthio)phenyl]-
(CA INDEX NAME)



RN 1071534-74-1 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]-4-(4-methoxyphenyl)- (CA INDEX NAME)

PAGE 1-A



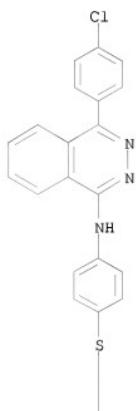
PAGE 2-A



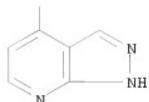
RN 1071534-77-4 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-(1H-pyrazolo[3,4-b]pyridin-4-ylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A



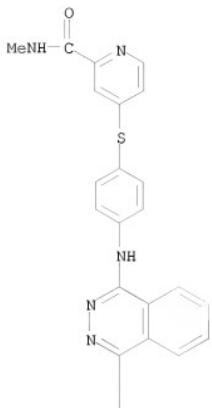
PAGE 2-A



RN 1071534-78-5 CAPLUS

CN 2-Pyridinecarboxamide, 4-[(4-[(4-chlorophenyl)-1-phthalazinyl]amino)phenyl]thio-N-methyl- (CA INDEX NAME)

PAGE 1-A

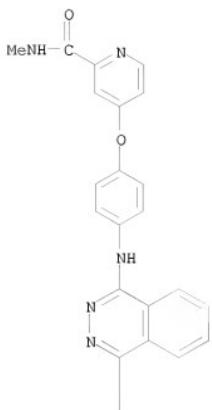


PAGE 2-A



RN 1071534-80-9 CAPLUS
CN 2-Pyridinecarboxamide, 4-[4-[(4-chlorophenyl)-1-phthalazinyl]amino]phenoxy-N-methyl- (CA INDEX NAME)

PAGE 1-A

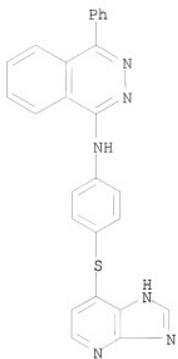


PAGE 2-A



RN 1071534-82-1 CAPLUS

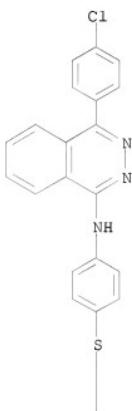
CN 1-Phthalazinamine, N-(4-(3H-imidazo[4,5-b]pyridin-7-ylthio)phenyl)-4-phenyl- (CA INDEX NAME)



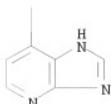
RN 1071534-85-4 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(3H-imidazo[4,5-b]pyridin-7-ylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A

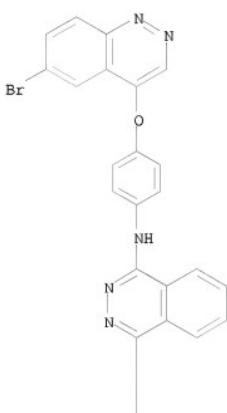


PAGE 2-A



RN 1071534-99-0 CAPLUS
CN 1-Phthalazinamine, N-[4-[(6-bromo-4-cinnolinyl)oxy]phenyl]-4-(4-chlorophenyl)- (CA INDEX NAME)

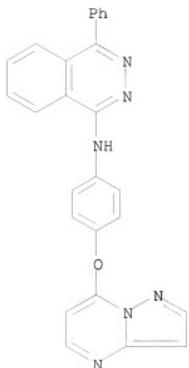
PAGE 1-A



PAGE 2-A

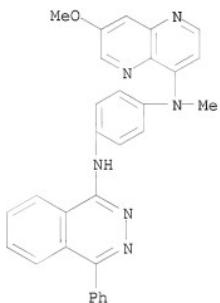


RN 1071535-01-7 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[4-(pyrazolo[1,5-a]pyrimidin-7-yloxy)phenyl]- (CA INDEX NAME)



RN 1071535-03-9 CAPLUS

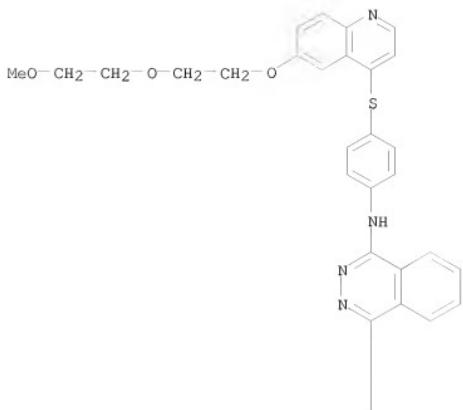
CN 1,4-Benzenediamine, N1-(7-methoxy-1,5-naphthyridin-4-yl)-N1-methyl-N4-(4-phenyl-1-phthalazinyl)- (CA INDEX NAME)



RN 1071535-06-2 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(6-[2-(2-methoxyethoxy)ethoxy]-4-quinolinyl]thio]phenyl]- (CA INDEX NAME)

PAGE 1-A



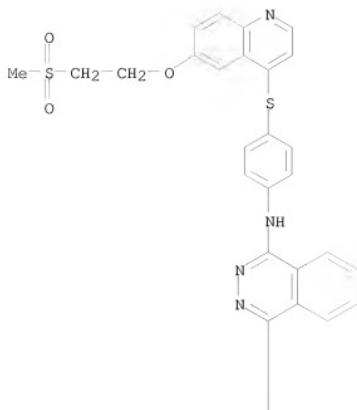
PAGE 2-A



RN 1071535-07-3 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(6-[(2-(methylsulfonyl)ethoxy]-4-quinolinyl)thio]phenyl]- (CA INDEX NAME)

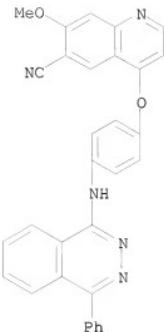
PAGE 1-A



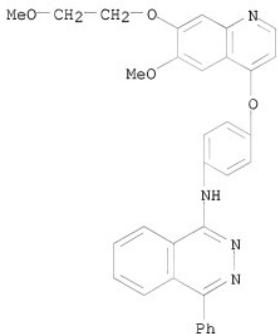
PAGE 2-A



RN 1071535-11-9 CAPLUS
CN 6-Quinolinecarbonitrile, 7-methoxy-4-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)

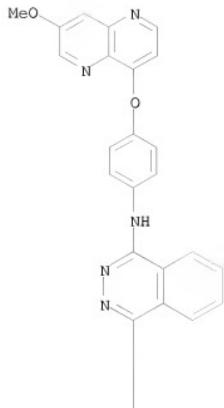


RN 1071535-13-1 CAPLUS
CN 1-Phthalazinamine, N-[4-[(6-methoxy-7-(2-methoxyethoxy)-4-quinolinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)

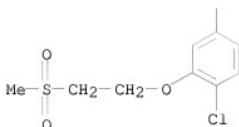


RN 1071535-15-3 CAPLUS
CN 1-Phthalazinamine, 4-[4-chloro-3-[2-(methylsulfonyl)ethoxy]phenyl]-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



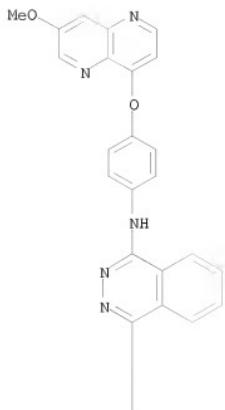
PAGE 2-A



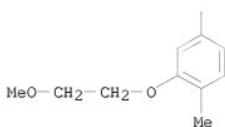
RN 1071535-17-5 CAPLUS

CN 1-Phthalazinamine, 4-[3-(2-methoxyethoxy)-4-methylphenyl]-N-(4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl)- (CA INDEX NAME)

PAGE 1-A



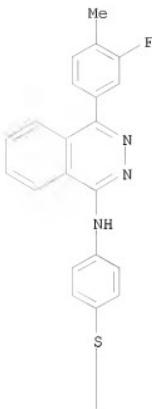
PAGE 2-A



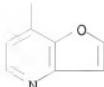
RN 1071535-24-4 CAPLUS

CN 1-Phthalazinamine, 4-(3-fluoro-4-methylphenyl)-N-(4-(furo[3,2-b]pyridin-7-ylthio)phenyl)- (CA INDEX NAME)

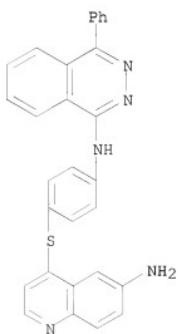
PAGE 1-A



PAGE 2-A

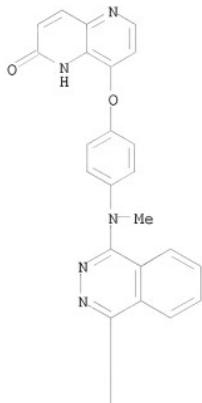


RN 1071535-25-5 CAPLUS
CN 1-Phthalazinamine, N-[4-[(6-amino-4-quinolinyl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071535-26-6 CAPLUS
CN 1,5-Naphthyridin-2(1H)-one, 8-[4-[4-(4-chlorophenyl)-1-phthalazinyl]methylamino]phenoxy- (CA INDEX NAME)

PAGE 1-A

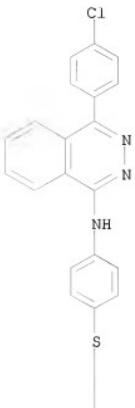


PAGE 2-A

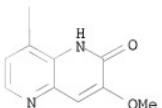


RN 1071535-37-9 CAPLUS
CN 1,5-Naphthyridin-2(1H)-one, 8-[4-[4-(4-chlorophenyl)-1-phthalazinyl]amino]phenylthio-3-methoxy- (CA INDEX NAME)

PAGE 1-A



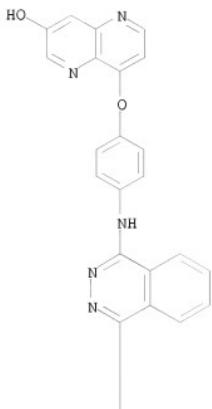
PAGE 2-A



RN 1071535-43-7 CAPLUS

CN 1,5-Naphthyridin-3-ol, 8-[4-[(4-chlorophenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)

PAGE 1-A



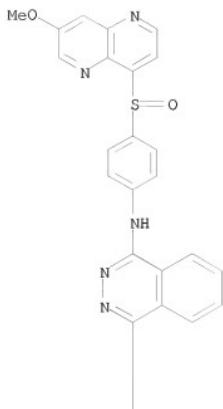
PAGE 2-A



RN 1071535-44-8 CAPLUS

CN 1-Phtalazinamine, 4-(4-fluorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)sulfinyl]phenyl]- (CA INDEX NAME)

PAGE 1-A

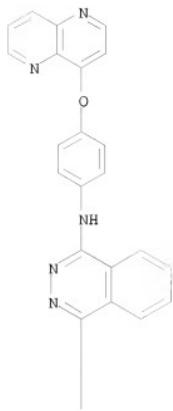


PAGE 2-A

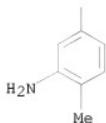


RN 1071535-52-8 CAPLUS
CN 1-Phtalazinamine, 4-(3-amino-4-methylphenyl)-N-(4-(1,5-naphthyridin-4-yloxy)phenyl)- (CA INDEX NAME)

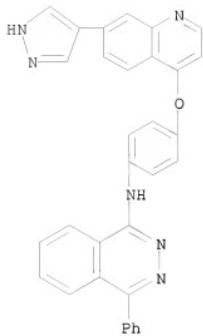
PAGE 1-A



PAGE 2-A



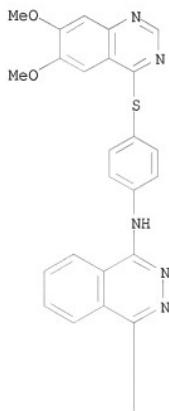
RN 1071535-54-0 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[4-[(7-(1H-pyrazol-4-yl)-4-quinolinyl]oxy]phenyl]- (CA INDEX NAME)



RN 1071535-55-1 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(6,7-dimethoxy-4-quinazolinyl)thio]phenyl]- (CA INDEX NAME)

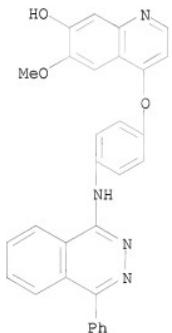
PAGE 1-A





RN 1071535-62-0 CAPLUS

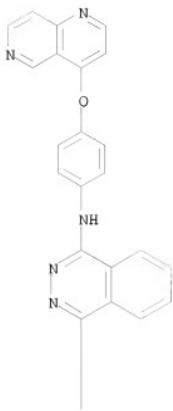
CN 7-Quinolinol, 6-methoxy-4-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-
(CA INDEX NAME)



RN 1071535-63-1 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(1,6-naphthyridin-4-yloxy)phenyl]-
(CA INDEX NAME)

PAGE 1-A

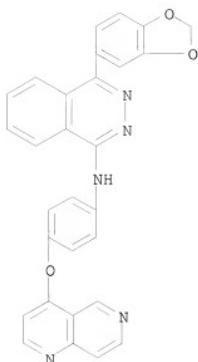


PAGE 2-A



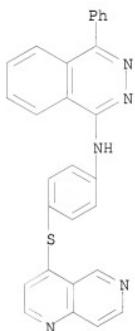
RN 1071535-65-3 CAPLUS

CN 1-Phtalazinamine, 4-(1,3-benzodioxol-5-yl)-N-(4-(1,6-naphthyridin-4-yloxy)phenyl)- (CA INDEX NAME)



RN 1071535-68-6 CAPLUS

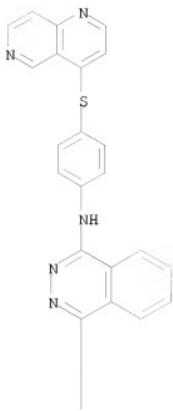
CN 1-Phthalazinamine, N-[4-(1,6-naphthyridin-4-ylthio)phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071535-70-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(4-chlorophenyl)-4-phenylamino]- (CA INDEX NAME)

PAGE 1-A

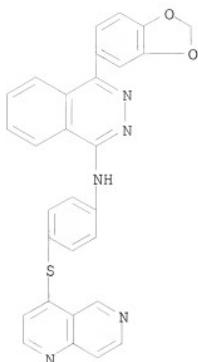


PAGE 2-A



RN 1071535-71-1 CAPLUS

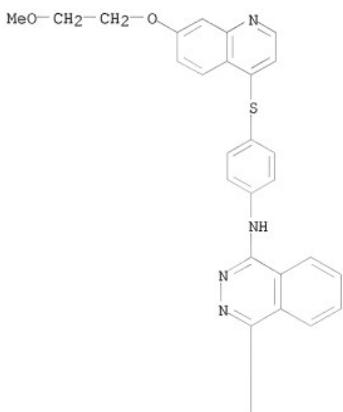
CN 1-Phthalazinamine, 4-(1,3-benzodioxol-5-yl)-N-(4-(1,6-naphthyridin-4-ylthio)phenyl)- (CA INDEX NAME)



RN 1071535-81-3 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[17-(2-methoxyethoxy)-4-quinolinyl]thiophenyl]- (CA INDEX NAME)

PAGE 1-A



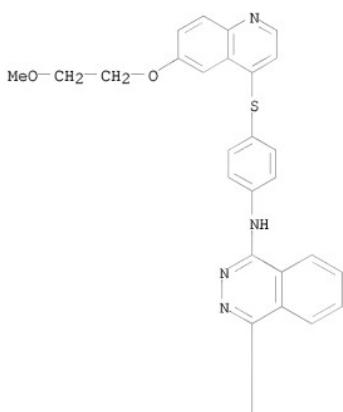
PAGE 2-A



RN 1071535-85-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(6-(2-methoxyethoxy)-4-quinolinyl]thio]phenyl]- (CA INDEX NAME)

PAGE 1-A



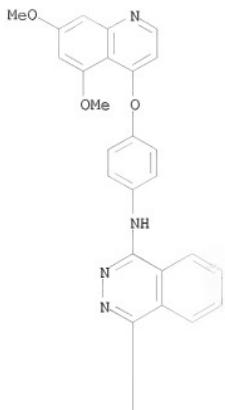
PAGE 2-A



RN 1071535-88-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(5,7-dimethoxy-4-quinolinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



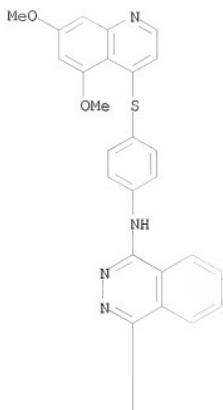
PAGE 2-A



RN 1071535-91-5 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(5,7-dimethoxy-4-quinolinyl)thiol]phenyl]- (CA INDEX NAME)

PAGE 1-A



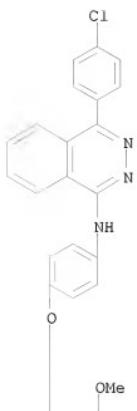
PAGE 2-A



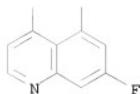
RN 1071535-92-6 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-fluoro-5-methoxy-4-quinolinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



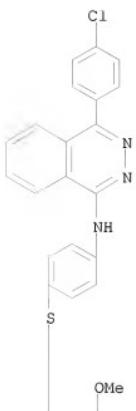
PAGE 2-A



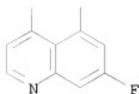
RN 1071535-93-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-fluoro-5-methoxy-4-quinolinyl)thiolphenyl]- (CA INDEX NAME)

PAGE 1-A

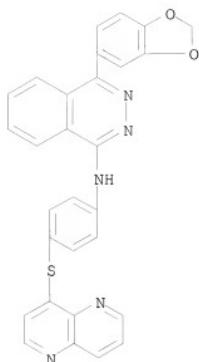


PAGE 2-A



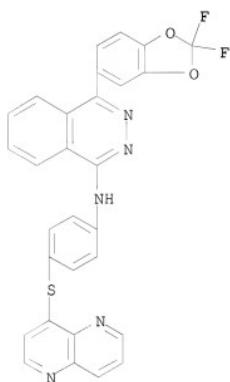
RN 1071536-04-3 CAPLUS

CN 1-Phthalazinamine, 4-(1,3-benzodioxol-5-yl)-N-(4-(1,5-naphthyridin-4-ylthio)phenyl)- (CA INDEX NAME)



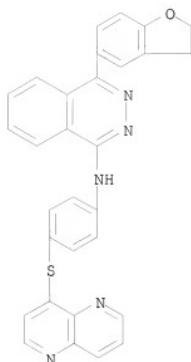
RN 1071536-06-5 CAPLUS

CN 1-Phthalazinamine, 4-(2,2-difluoro-1,3-benzodioxol-5-yl)-N-[4-(1,5-naphthyridin-4-ylthio)phenyl]- (CA INDEX NAME)



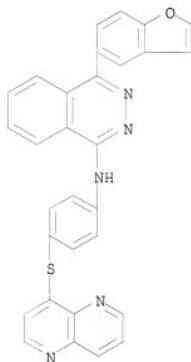
RN 1071536-09-8 CAPLUS

CN 1-Phthalazinamine, 4-(2,3-dihydro-5-benzofuranyl)-N-[4-(1,5-naphthyridin-4-ylthio)phenyl]- (CA INDEX NAME)



RN 1071536-10-1 CAPLUS

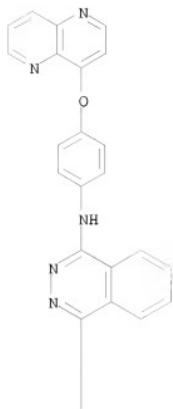
CN 1-Phtalazinamine, 4-(5-benzofuranyl)-N-[4-(1,5-naphthyridin-4-ylothio)phenyl]- (CA INDEX NAME)



RN 1071536-15-6 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-(1,5-naphthyridin-4-yloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



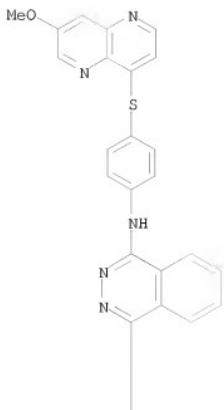
PAGE 2-A



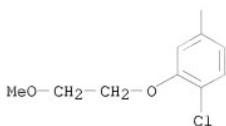
RN 1071536-18-9 CAPLUS

CN 1-Phthalazinamine, 4-[4-chloro-3-(2-methoxyethoxy)phenyl]-N-(4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl)- (CA INDEX NAME)

PAGE 1-A



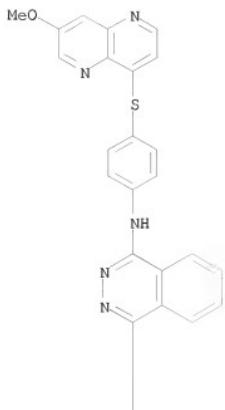
PAGE 2-A



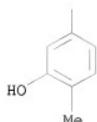
RN 1071536-20-3 CAPLUS

CN Phenol, 5-{4-[{4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl}amino]-1-phthalazinyl}-2-methyl- (CA INDEX NAME)

PAGE 1-A



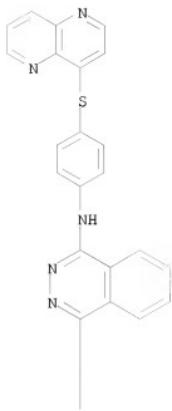
PAGE 2-A



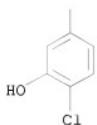
RN 1071536-23-6 CAPLUS

CN Phenol, 2-chloro-5-{4-[(4-(1,5-naphthyridin-4-ylthio)phenyl)amino]-1-phthalazinyl}- (CA INDEX NAME)

PAGE 1-A



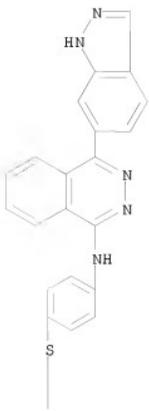
PAGE 2-A



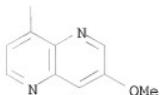
RN 1071536-25-8 CAPLUS

CN 1-Phthalazinamine, 4-(1H-indazol-6-yl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A



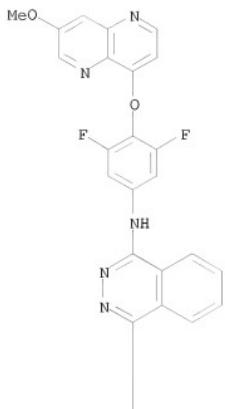
PAGE 2-A



RN 1071536-26-9 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[3,5-difluoro-4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



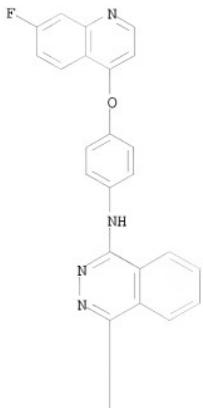
PAGE 2-A



RN 1071536-29-2 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-fluoro-4-quinolinyl)oxy]phenyl]- (CA INDEX NAME)

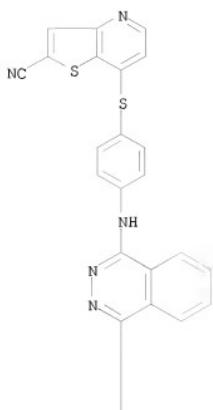
PAGE 1-A



PAGE 2-A

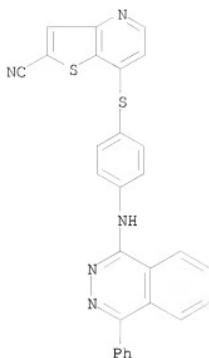


RN 1071536-32-7 CAPLUS
CN Thieno[3,2-b]pyridine-2-carbonitrile,
7-[14-[4-(1,3-benzodioxol-5-yl)-1-phthalazinyl]amino]phenyl]thio]- (CA
INDEX NAME)



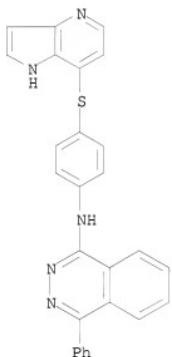
RN 1071536-34-9 CAPLUS

CN Thieno[3,2-b]pyridine-2-carbonitrile,
7-[(4-[(4-phenyl-1-phthalazinyl)amino]phenyl)thio]- (CA INDEX NAME)



RN 1071536-41-8 CAPLUS

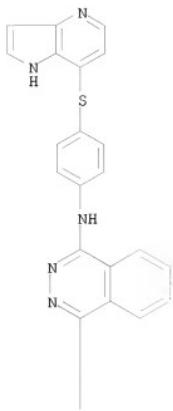
CN 1-Phthalazinamine, 4-phenyl-N-[4-(1H-pyrrolo[3,2-b]pyridin-7-ylthio)phenyl]- (CA INDEX NAME)



RN 1071536-43-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(1H-pyrrolo[3,2-b]pyridin-7-ylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A



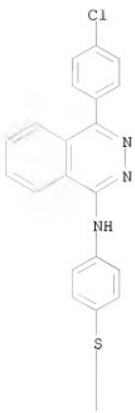
PAGE 2-A



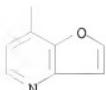
RN 1071536-45-2 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(furo[3,2-b]pyridin-7-ylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A

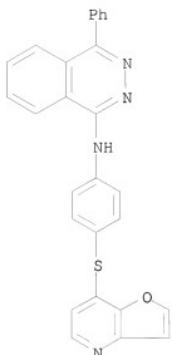


PAGE 2-A



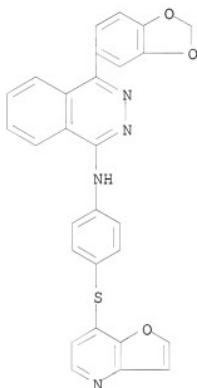
RN 1071536-46-3 CAPLUS

CN 1-Phthalazinamine, N-[4-(furo[3,2-b]pyridin-7-ylthio)phenyl]-4-phenyl-
(CA INDEX NAME)



RN 1071536-47-4 CAPLUS

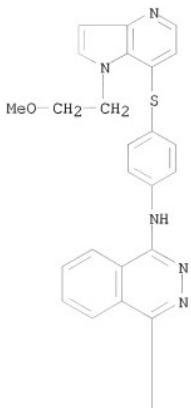
CN 1-Phthalazinamine, 4-(1,3-benzodioxol-5-yl)-N-[4-(furo[3,2-b]pyridin-7-ylthio)phenyl]- (CA INDEX NAME)



RN 1071536-51-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(1-(2-methoxyethyl)-1H-pyrrolo[3,2-b]pyridin-7-yl)thiophenyl]- (CA INDEX NAME)

PAGE 1-A



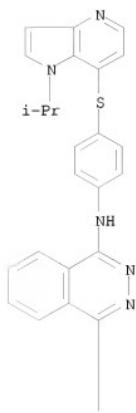
PAGE 2-A



RN 1071536-55-4 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(1-(1-methylethyl)-1H-pyrrololo[3,2-b]pyridin-7-yl]thio]phenyl]- (CA INDEX NAME)

PAGE 1-A



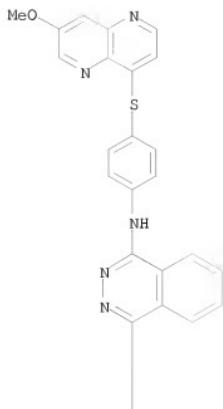
PAGE 2-A



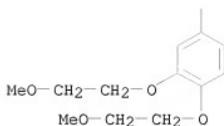
RN 1071536-60-1 CAPLUS

CN 1-Phtalazinamine, 4-[3,4-bis(2-methoxyethoxy)phenyl]-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

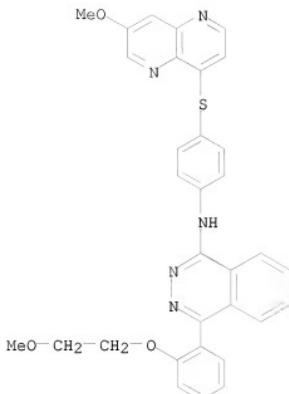


PAGE 2-A



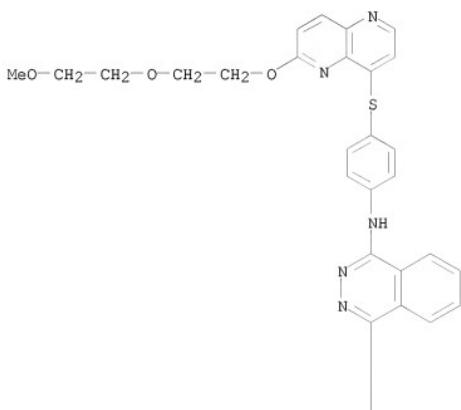
RN 1071536-61-2 CAPLUS

CN 1-Phthalazinamine, 4-[2-(2-methoxyethoxy)phenyl]-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)



RN 1071536-64-5 CAPLUS
CN 1-Pthalazinamine, 4-(4-chlorophenyl)-N-[4-[(6-[2-(2-methoxyethoxy)ethoxy]-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

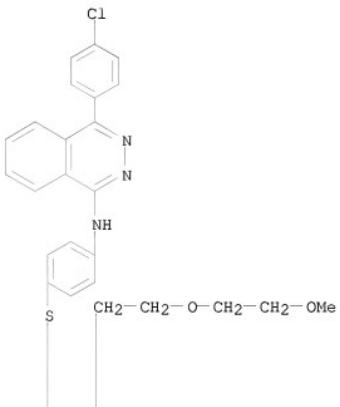


PAGE 2-A

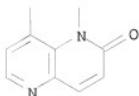


RN 1071536-65-6 CAPLUS
CN 1,5-Naphthyridin-2(1H)-one, 8-[4-[(4-(4-chlorophenyl)-1-phthalazinyl)amino]phenyl]thio]-1-[2-(2-methoxyethoxy)ethyl]- (CA INDEX NAME)

PAGE 1-A

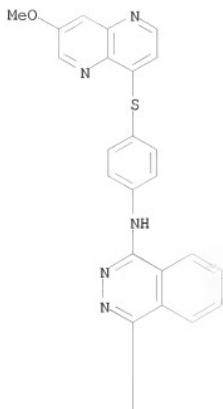


PAGE 2-A

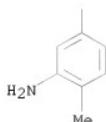


RN 1071536-67-8 CAPLUS
CN 1-Phthalazinamine, 4-(3-amino-4-methylphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thiophenyl]- (CA INDEX NAME)

PAGE 1-A



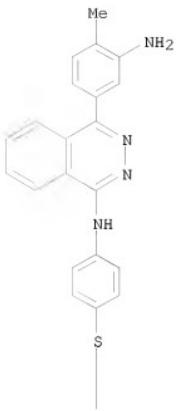
PAGE 2-A



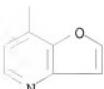
RN 1071536-71-4 CAPLUS

CN 1-Phthalazinamine, 4-(3-amino-4-methylphenyl)-N-(4-(furo[3,2-b]pyridin-7-ylthio)phenyl)- (CA INDEX NAME)

PAGE 1-A



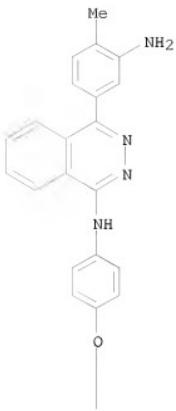
PAGE 2-A



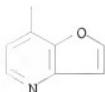
RN 1071536-73-6 CAPLUS

CN 1-Phthalazinamine, 4-(3-amino-4-methylphenyl)-N-[4-(furo[3,2-b]pyridin-7-yloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



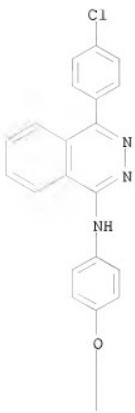
PAGE 2-A



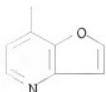
RN 1071536-80-5 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-(furo[3,2-b]pyridin-7-yloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



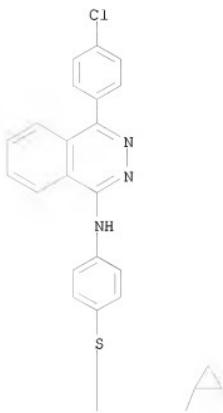
PAGE 2-A



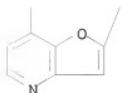
RN 1071536-85-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(2-cyclopropylfuro[3,2-b]pyridin-7-yl)thiolphenyl]- (CA INDEX NAME)

PAGE 1-A

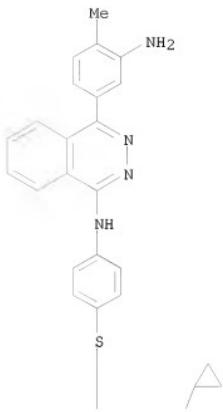


PAGE 2-A

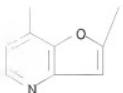


RN 1071536-87-2 CAPLUS
CN 1-Phthalazinamine, 4-(3-amino-4-methylphenyl)-N-[4-[(2-cyclopropylfuro[3,2-b]pyridin-7-yl)thiolphenyl]- (CA INDEX NAME)

PAGE 1-A

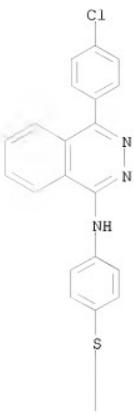


PAGE 2-A

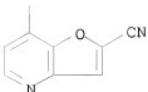


RN 1071536-92-9 CAPLUS
CN Furo[3,2-b]pyridine-2-carbonitrile,
7-[(4-[4-(4-chlorophenyl)-1-phthalazinyl]amino)phenyl]thio]- (CA INDEX
NAME)

PAGE 1-A



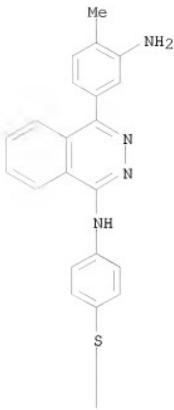
PAGE 2-A



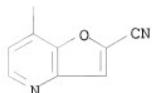
RN 1071536-93-0 CAPLUS

CN Furo[3,2-b]pyridine-2-carbonitrile,
7-[[4-[(4-(3-amino-4-methylphenyl)-1-phthalazinyl)amino]phenyl]thio]- (CA
INDEX NAME)

PAGE 1-A



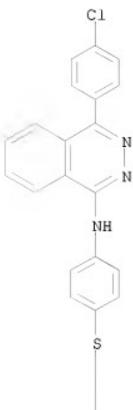
PAGE 2-A



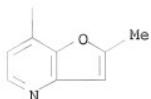
RN 1071536-95-2 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(2-methylfuro[3,2-b]pyridin-7-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A



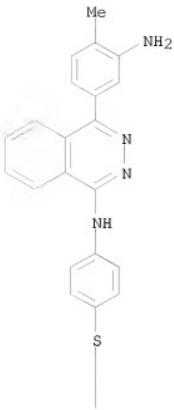
PAGE 2-A



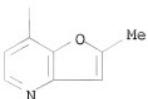
RN 1071536-97-4 CAPLUS

CN 1-Phtalazinamine, 4-(3-amino-4-methylphenyl)-N-[4-[(2-methylfuro[3,2-b]pyridin-7-yl)thiol]phenyl]- (CA INDEX NAME)

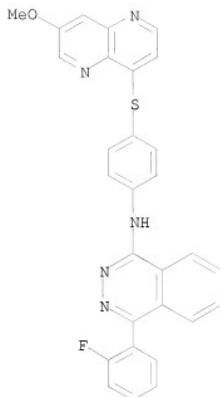
PAGE 1-A



PAGE 2-A

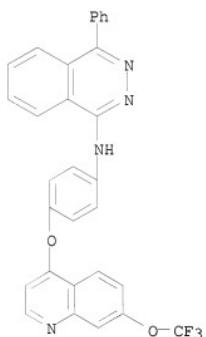


RN 1071537-02-4 CAPLUS
CN 1-Phtalazinamine, 4-(2-fluorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)



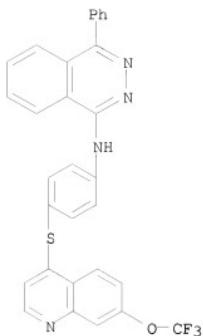
RN 1071537-03-5 CAPLUS

CN 1-PhtHALAZINamine, 4-phenyl-N-[4-[(7-(trifluoromethoxy)-4-quinolinyl]oxy]phenyl]- (CA INDEX NAME)



RN 1071537-05-7 CAPLUS

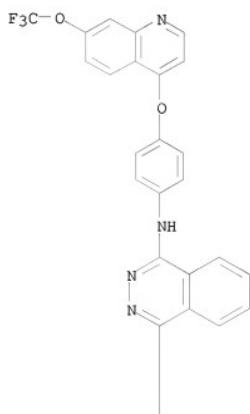
CN 1-PhtHALAZINamine, 4-phenyl-N-[4-[(7-(trifluoromethoxy)-4-quinolinyl]thio]phenyl]- (CA INDEX NAME)



RN 1071537-07-9 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(7-(trifluoromethoxy)-4-quinolinyl]oxy]phenyl]- (CA INDEX NAME)

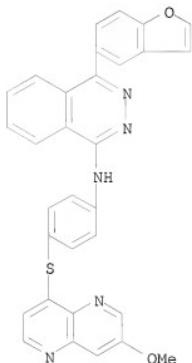
PAGE 1-A





RN 1071537-10-4 CAPLUS

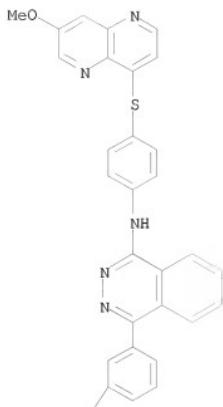
CN 1-Phthalazinamine, 4-(5-benzofuranyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)



RN 1071537-42-2 CAPLUS

CN 1-Phthalazinamine, 4-(3-chlorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

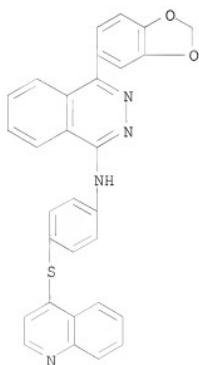
PAGE 1-A



PAGE 2-A

C1

RN 1071537-43-3 CAPLUS
CN 1-Phthalazinamine, 4-(1,3-benzodioxol-5-yl)-N-[4-(4-quinolinylthio)phenyl]-
(CA INDEX NAME)



IT 1071537-44-4P 1071537-45-5P 1071537-50-2P
1071537-54-6P 1071537-59-1P 1071537-62-6P
1071537-79-5P 1071537-91-1P 1071537-93-3P
1071537-94-4P 1071538-05-0P 1071538-28-7P
1071538-33-4P 1071538-37-8P 1071538-42-5P
1071538-46-9P 1071538-54-9P 1071538-55-0P
1071538-60-7P 1071538-67-4P 1071538-71-0P
1071538-90-3P 1071538-93-6P 1071538-94-7P
1071539-05-3P 1071539-09-7P 1071539-33-7P
1071539-34-8P 1071539-35-9P 1071539-37-1P

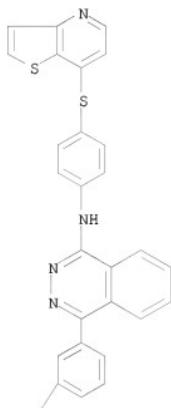
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of phthalazinamine derivs. and related compds. as aurora kinase modulators useful in the treatment of cancer and cancer-related diseases)

RN 1071537-44-4 CAPLUS

CN 1-Phthalazinamine, 4-(3-chlorophenyl)-N-[4-(thieno[3,2-b]pyridin-7-ylthio)phenyl]- (CA INDEX NAME)

PAGE 1-A

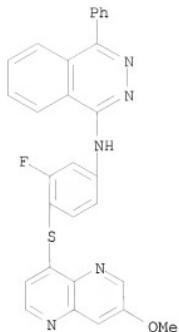


PAGE 2-A

Cl

RN 1071537-45-5 CAPLUS

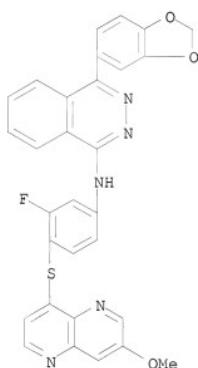
CN 1-Phthalazinamine, N-[3-fluoro-4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071537-50-2 CAPLUS

CN 1-Phtalazinamine, 4-(1,3-benzodioxol-5-yl)-N-[3-fluoro-4-[(7-methoxy-1,5-

naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

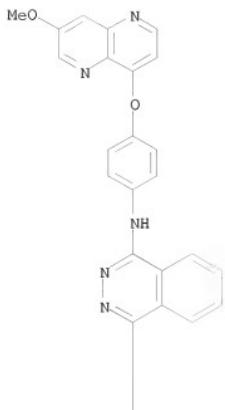


RN 1071537-54-6 CAPLUS

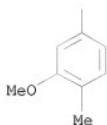
CN 1-Phtalazinamine, 4-(3-methoxy-4-methylphenyl)-N-[4-[(7-methoxy-1,5-

naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



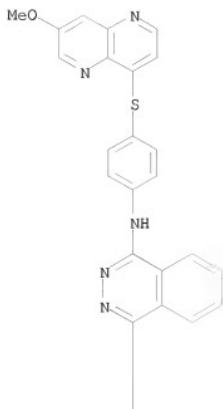
PAGE 2-A



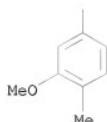
RN 1071537-59-1 CAPLUS

CN 1-Phtalazinamine, 4-(3-methoxy-4-methylphenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

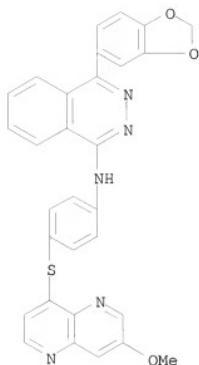
PAGE 1-A



PAGE 2-A

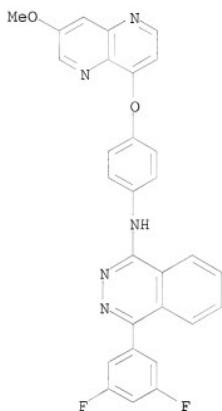


RN 1071537-62-6 CAPLUS
CN 1-Phtalazinamine, 4-(1,3-benzodioxol-5-yl)-N-(4-[(7-methoxy-1,5-naphthyridin-4-yl)thio]phenyl)- (CA INDEX NAME)



RN 1071537-79-5 CAPLUS

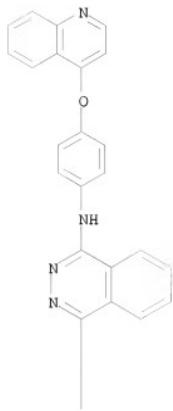
CN 1-Phtalazinamine, 4-(3,5-difluorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)



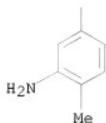
RN 1071537-91-1 CAPLUS

CN 1-Phtalazinamine, 4-(3-amino-4-methylphenyl)-N-[4-(4-quinolinylxyloxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



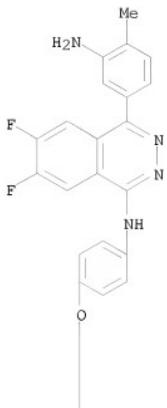
PAGE 2-A



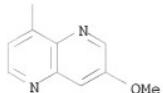
RN 1071537-93-3 CAPLUS

CN 1-Phthalazinamine, 4-(3-amino-4-methylphenyl)-6,7-difluoro-N-[4-((7-methoxy-1,5-naphthyridin-4-yl)oxy)phenyl]- (CA INDEX NAME)

PAGE 1-A

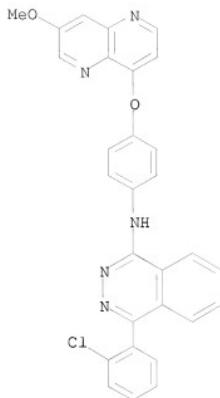


PAGE 2-A

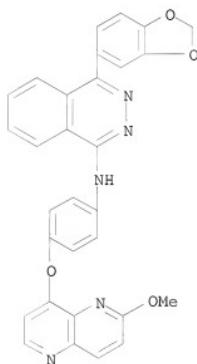


RN 1071537-94-4 CAPLUS

CN 1-Phthalazinamine, 4-(2-chlorophenyl)-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

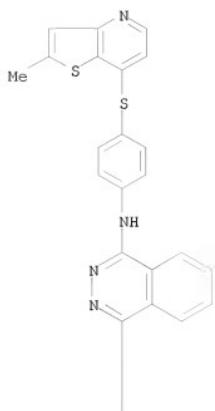


RN 1071538-05-0 CAPLUS
CN 1-Phtalazinamine, 4-[(1,3-benzodioxol-5-yl)oxy]-N-[4-[(6-methoxy-1,3-benzodioxol-5-yl)oxy]phenyl]- (CA INDEX NAME)



RN 1071538-28-7 CAPLUS
CN 1-Phtalazinamine, 4-[(4-chlorophenyl)thio]-N-[4-[(2-methylthieno[3,2-b]pyridin-7-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

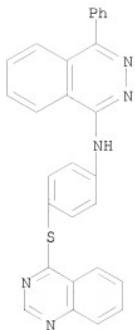


PAGE 2-A



RN 1071538-33-4 CAPLUS

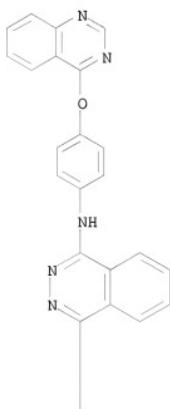
CN 1-Phthalazinamine, 4-phenyl-N-[4-(4-quinazolinylthio)phenyl]- (CA INDEX NAME)



RN 1071538-37-8 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-(4-quinazolinyl)phenyl]-
(CA INDEX NAME)

PAGE 1-A

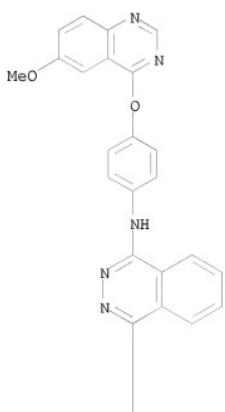


PAGE 2-A



RN 1071538-42-5 CAPLUS
CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(6-methoxy-4-quinazolinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

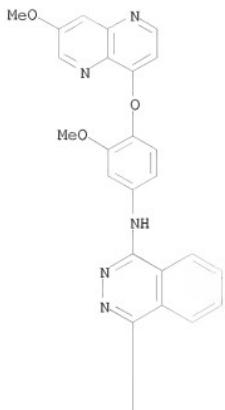


PAGE 2-A



RN 1071538-46-9 CAPLUS
CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[3-methoxy-4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



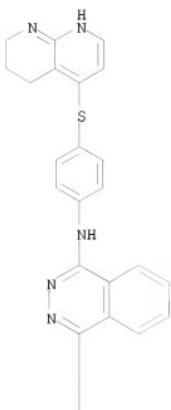
PAGE 2-A



RN 1071538-54-9 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(5,6,7,8-tetrahydro-1,8-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

PAGE 1-A

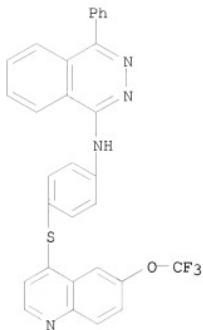


PAGE 2-A



RN 1071538-55-0 CAPLUS

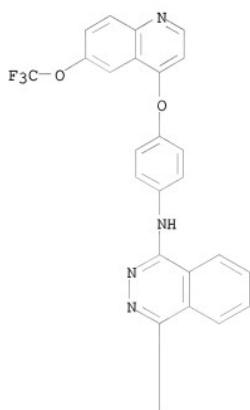
CN 1-Phthalazinamine, 4-phenyl-N-[4-[(6-(trifluoromethoxy)-4-quinolinyl]thio]phenyl]- (CA INDEX NAME)



RN 1071538-60-7 CAPLUS

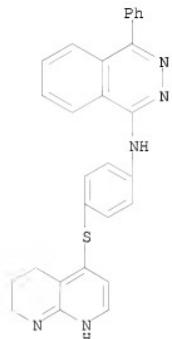
CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(6-(trifluoromethoxy)-4-quinolinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

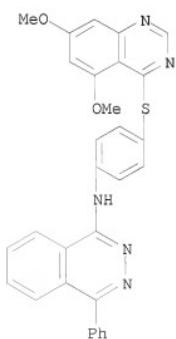




RN 1071538-67-4 CAPLUS
 CN 1-Phtalazinamine, 4-phenyl-N-[4-[(5,6,7,8-tetrahydro-1,8-naphthyridin-4-yl)thio]phenyl]- (CA INDEX NAME)

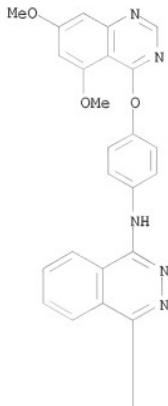


RN 1071538-71-0 CAPLUS
 CN 1-Phtalazinamine, N-[4-[(5,7-dimethoxy-4-quinazolinyl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071538-90-3 CAPLUS
CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[(5,7-dimethoxy-4-quinazolinyl)oxyl]phenyl]- (CA INDEX NAME)

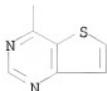
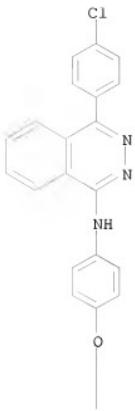
PAGE 1-A



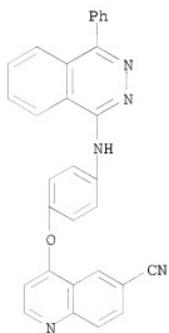
PAGE 2-A



RN 1071538-93-6 CAPLUS
CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-(thieno[3,2-d]pyrimidin-4-yloxy)phenyl]- (CA INDEX NAME)

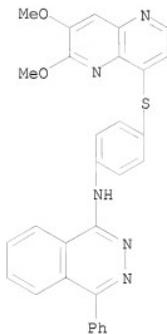


RN 1071538-94-7 CAPLUS
CN 6-Quinolinecarbonitrile, 4-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-
(CA INDEX NAME)



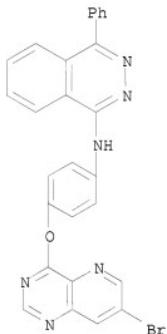
RN 1071539-05-3 CAPLUS

CN 1-Phtalazinamine, N-[4-[(6,7-dimethoxy-1,5-naphthyridin-4-yl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071539-09-7 CAPLUS

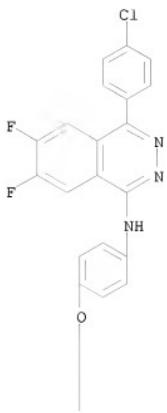
CN 1-Phtalazinamine, N-[4-[(7-bromopyrido[3,2-d]pyrimidin-4-yl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



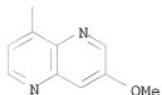
RN 1071539-33-7 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-6,7-difluoro-N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



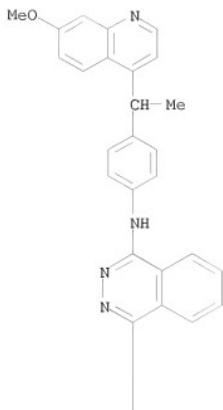
PAGE 2-A



RN 1071539-34-8 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[1-(7-methoxy-4-quinolinyl)ethyl]phenyl]- (CA INDEX NAME)

PAGE 1-A



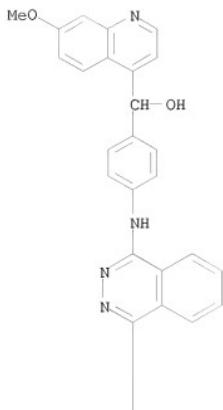
PAGE 2-A



RN 1071539-35-9 CAPLUS

CN 4-Quinolinemethanol, α -[4-[(4-(4-chlorophenyl)-1-phthalazinyl)amino]phenyl]-7-methoxy- (CA INDEX NAME)

PAGE 1-A

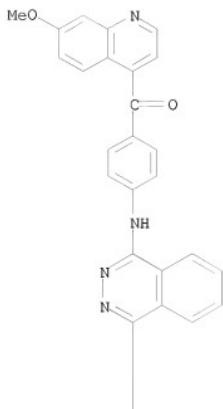


PAGE 2-A



RN 1071539-37-1 CAPLUS

CN Methanone, [4-[(4-(4-chlorophenyl)-1-phthalazinyl)amino]phenyl](7-methoxy-4-quinolinyl)- (CA INDEX NAME)



IT 1071540-24-3P 1071540-28-7P 1071540-32-3P

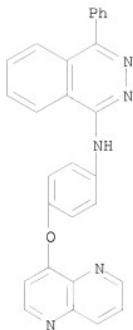
1071584-40-1P

RL; RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of phthalazinamine derivs. and related compds. as aurora kinase modulators useful in the treatment of cancer and cancer-related diseases)

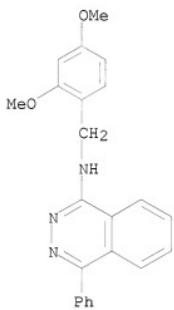
RN 1071540-24-3 CAPLUS

CN 1-Phthalazinamine, N-[4-(1,5-naphthyridin-4-yloxy)phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071540-28-7 CAPLUS

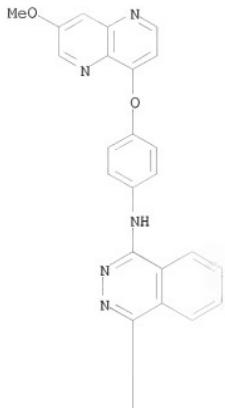
CN 1-Phthalazinamine, N-[(2,4-dimethoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)



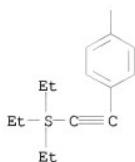
RN 1071540-32-3 CAPLUS

CN 1-Phthalazinamine, N-[4-[(7-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]-4-[4-[2-(triethylthio)ethynyl]phenyl]- (CA INDEX NAME)

PAGE 1-A

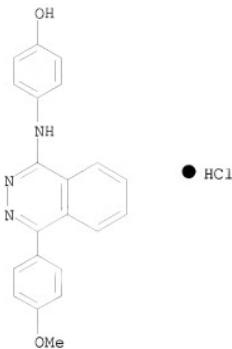


PAGE 2-A



RN 1071584-40-1 CAPLUS

CN Phenol, 4-[[4-(4-methoxyphenyl)-1-phthalazinyl]amino]-, hydrochloride
(1:1) (CA INDEX NAME)

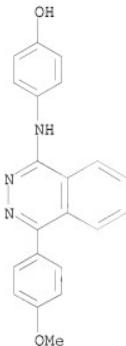


IT 364600-57-7 945600-03-3 1071541-32-6
 1071541-33-7 1071541-61-1 1071541-62-2
 1071541-67-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; preparation of phthalazinamine derivs. and related
 compds. as aurora kinase modulators useful in the treatment of cancer
 and cancer-related diseases)

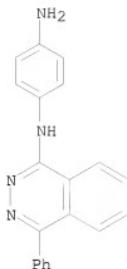
RN 364600-57-7 CAPLUS

CN Phenol, 4-[(4-(4-methoxyphenyl)-1-phthalazinyl)amino]- (CA INDEX NAME)

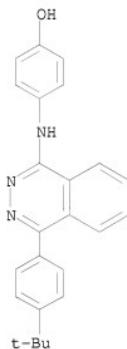


RN 945600-03-3 CAPLUS

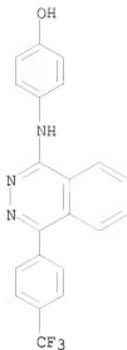
CN 1,4-Benzenediamine, N1-(4-phenyl-1-phthalazinyl)- (CA INDEX NAME)



RN 1071541-32-6 CAPLUS
CN Phenol, 4-[(4-(1,1-dimethylethyl)phenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)

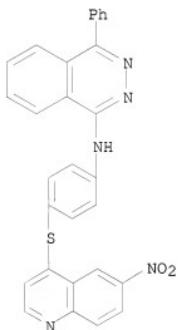


RN 1071541-33-7 CAPLUS
CN Phenol, 4-[(4-[4-(trifluoromethyl)phenyl]phenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)



RN 1071541-61-1 CAPLUS

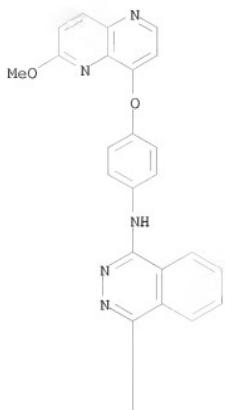
CN 1-PhtHALAZINamine, N-[4-[(6-nitro-4-quinolinyl)thio]phenyl]-4-phenyl- (CA INDEX NAME)



RN 1071541-62-2 CAPLUS

CN 1-PhtHALAZINamine, 4-(4-chlorophenyl)-N-[4-[(6-methoxy-1,5-naphthyridin-4-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

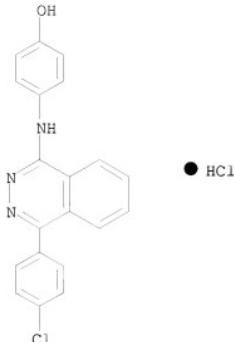


PAGE 2-A



RN 1071541-67-7 CAPLUS

CN Phenol, 4-[{4-(4-chlorophenyl)-1-phthalazinyl]amino]-, hydrochloride (1:1)
(CA INDEX NAME)

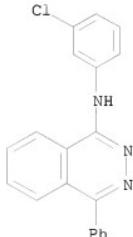


L6 ANSWER 4 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:974550 CAPLUS
 DOCUMENT NUMBER: 149:259518
 TITLE: Nitric oxide donor compns. and methods for treating neuropathy
 INVENTOR(S): Maibach, Todd
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 10pp.
 CODEN: USXECO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| US 20080193385 | A1 | 20080814 | US 2007-931076 | 20071031 |
| WO 2008098192 | A2 | 20080814 | WO 2008-US53461 | 20080208 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, EW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| PRIORITY APPLN. INFO.: | | | US 2007-900099P | P 20070208 |
| | | | US 2007-931076 | A 20071031 |

AB The present invention relates to compns. and methods for alleviating the painful symptoms due to neuropathy. Specifically, the method involves administering to a patient a composition comprising a nitric oxide donor that may be applied topically on the legs or arms to alleviate the neg. effects due to neuropathy. The present invention relates to compns. and methods for alleviating the painful symptoms due to neuropathy. Specifically, the method involves administering to a patient a composition comprising a nitric

oxide donor that may be applied topically on the legs or arms to alleviate
 the neg. effects due to neuropathy.
 IT 78351-75-4
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (nitric oxide donor compns. and methods for treating neuropathy)
 RN 78351-75-4 CAPLUS
 CN 1-Phtalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)

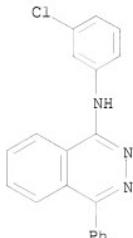


L6 ANSWER 5 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:973771 CAPLUS
 DOCUMENT NUMBER: 149:259515
 TITLE: Compositions and methods for treating neuropathy
 INVENTOR(S): Maibach, Todd
 PATENT ASSIGNEE(S): USA
 SOURCE: PCT Int. Appl., 26pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2008098192 | A2 | 20080814 | WO 2008-US53461 | 200808208 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| US 20080193385 | A1 | 20080814 | US 2007-931076 | 20071031 |
| PRIORITY APPLN. INFO.: | | | US 2007-900099P | P 20070208 |
| | | | US 2007-931076 | A 20071031 |

AB The present invention relates to compns. and methods for alleviating the
 painful symptoms due to neuropathy. Specifically, the method involves
 administering to a patient a composition comprising a nitric oxide donor that
 may be applied topically on the legs or arms to alleviate the neg. effects

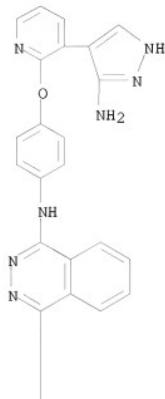
due to neuropathy.
IT 78351-75-4, MY 5445
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(nitric oxide donor compns. and methods for treating neuropathy)
RN 78351-75-4 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 6 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:723693 CAPLUS
DOCUMENT NUMBER: 149:252062
TITLE: Pharmacophore modelling and virtual screening for identification of new Aurora-A kinase inhibitors
Deng, Xiao-Qiang; Wang, Hui-Yuan; Zhao, Ying-Lan;
Xiang, Ming-Li; Jiang, Pei-Du; Cao, Zhi-Xing; Zheng,
Yu-Zhu; Luo, Shi-Dong; Yu, Luo-Ting; Wei, Yu-Quan;
Yang, Sheng-Yong
CORPORATE SOURCE: State Key Laboratory of Biotherapy and Cancer Center,
West China Hospital West China Medical School, Sichuan
University, Sichuan, 610041, Peop. Rep. China
SOURCE: Chemical Biology & Drug Design (2008), 71(6), 533-539
CODEN: CBDDAL; ISSN: 1747-0277
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Aurora-A has been identified as one of the most attractive targets for cancer therapy and a considerable number of Aurora-A inhibitors have been reported recently. In order to clarify the essential structure-activity relationship for the known Aurora-A inhibitors as well as identify new lead compds. against Aurora-A, 3D pharmacophore models were developed based on the known inhibitors. The best hypothesis, Hyp1, was used to screen mol. structural databases, including Specs and China Natural Products Database for potential lead compds. The hit compds. were subsequently subjected to filtering by Lipinski's rules and docking study to refine the retrieved hits and as a result to reduce the rate of false pos. Finally, 39 compds. were purchased for further in vitro assay against several human tumor cell lines including A549, MCF-7, HepG2 and PC-3, in which Aurora-A is overexpressed. Two compds. show very low micromolar inhibition potency against some of these tumor cells. And they have been selected for further investigation.
IT 945597-81-9
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmacophore modeling and virtual screening for identification of new

Aurora-A kinase inhibitors)
RN 945597-81-9 CAPLUS
CN 1-Phtalazinamine, N-[4-[(3-(3-amino-1H-pyrazol-4-yl)-2-pyridinylloxy)phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:674375 CAPLUS
DOCUMENT NUMBER: 149:24870
TITLE: Methods for identifying inhibitors of solute
transporters, and therapeutic use
INVENTOR(S): Verkman, Alan S.; Levin, Marc Harris
PATENT ASSIGNEE(S): Verkman, Alan, S., USA; Levin, Marc, Harris
SOURCE: PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

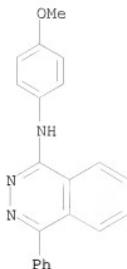
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|---|--|
| WO 2008067196 | A2 | 20080605 | WO 2007-US85017 | 20071116 |
| WO 2008067196 | A3 | 20081023 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| PRIORITY APPLN. INFO.: | | | US 2006-859665P
US 2006-859666P
US 2006-859800P | P 20061116
P 20061116
P 20061116 |

AB The invention provides methods for identifying and characterizing agents that alter the volume of a cell. Methods are provided for rapid screening and identification of an agent that alters the capability of a small, neutrally charged solute transporter to transport the solute across a cell membrane. The methods of the invention may be used to identify and characterize inhibitors of urea transporters, to identify and characterize inhibitors of aquaporins, and to identify and characterize inhibitors of other small, neutrally charged solutes such as glucose. The identified inhibitors may be used to treat a variety of diseases, e.g. diseases associated with a fluid retention imbalance.

IT 78351-69-6 330829-79-3 330830-30-3
 335206-93-4 364597-81-9 364625-28-5
 364626-60-8 374911-91-8 374914-31-5
 374920-49-7 375352-54-8 375353-73-4
 375355-44-5 375358-45-5 375360-16-0
 375828-13-0 375830-70-9 375830-85-6
 375832-06-7 375833-78-6 375835-00-0
 375840-32-7 375841-50-2 376374-54-8
 397278-96-5 488724-46-5 496773-16-1
 510759-89-4 931104-77-7 931104-78-8

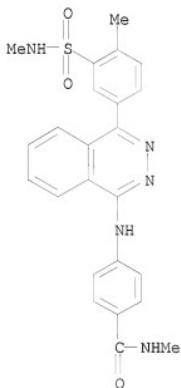
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (methods for identifying inhibitors of solute transporters, and therapeutic use)

RN 78351-69-6 CAPLUS
 CN 1-Phthalazinamine, N-(4-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



RN 330829-79-3 CAPLUS

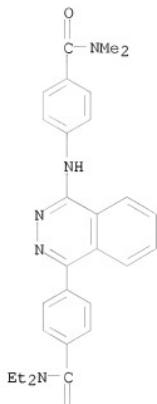
CN Benzanide, N-methyl-4-[(4-methyl-3-[(methylamino)sulfonyl]phenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)



RN 330830-30-3 CAPLUS

CN Benzanide, 4-[(4-[(diethylamino)carbonyl]phenyl)-1-phthalazinyl]amino-N,N-dimethyl- (CA INDEX NAME)

PAGE 1-A

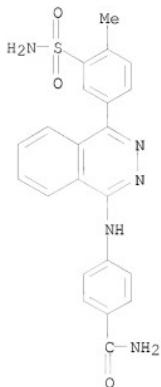


PAGE 2-A

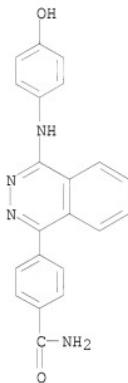


RN 335206-93-4 CAPLUS

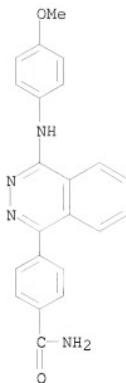
CN Benzamide, 4-[(4-[3-(aminosulfonyl)-4-methylphenyl]-1-phthalazinyl]amino]-
(CA INDEX NAME)



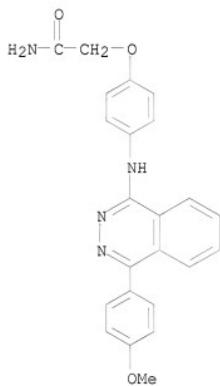
RN 364597-81-9 CAPLUS
CN Benzamide, 4-[4-[(4-hydroxyphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



RN 364625-28-5 CAPLUS
CN Benzamide, 4-[4-[(4-methoxyphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

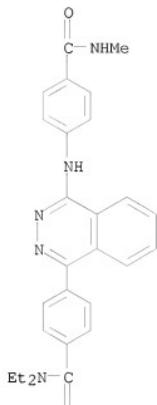


RN 364626-60-8 CAPLUS
CN Acetamide, 2-[4-[(4-methoxyphenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)



RN 374911-91-8 CAPLUS
CN Benzamide, N,N-diethyl-4-[(4-[(methylamino)carbonyl]phenyl)amino]-1-phthalazinyl- (CA INDEX NAME)

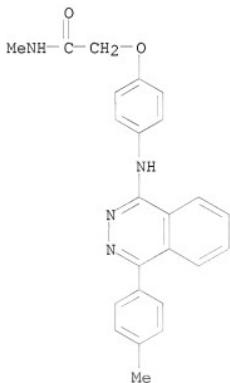
PAGE 1-A



PAGE 2-A

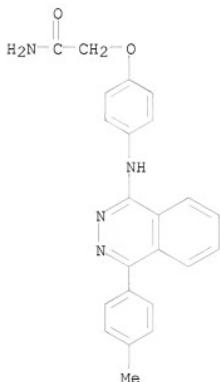


RN 374914-31-5 CAPLUS
CN Acetamide, N-methyl-2-[4-[(4-methylphenyl)-1-
phthalazinyl]amino]phenoxy]- (CA INDEX NAME)



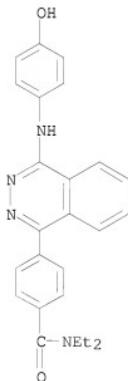
RN 374920-49-7 CAPLUS

CN Acetamide, 2-[4-[(4-methylphenyl)-1-phthalazinyl]amino]phenoxy- (CA
INDEX NAME)



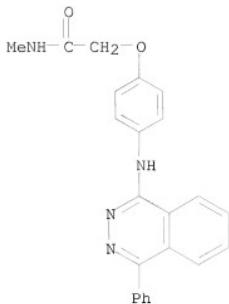
RN 375352-54-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[(4-hydroxyphenyl)amino]-1-phthalazinyl- (CA
INDEX NAME)



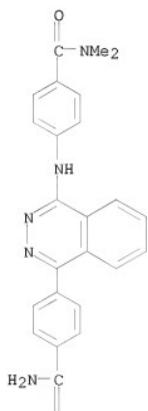
RN 375353-73-4 CAPLUS

CN Acetamide, N-methyl-2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy- (CA
INDEX NAME)



RN 375355-44-5 CAPLUS
 CN Benzamide, 4-[4-[4-(aminocarbonyl)phenyl]-1-phthalazinyl]amino]-N,N-dimethyl- (CA INDEX NAME)

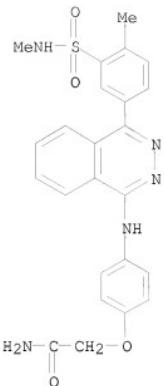
PAGE 1-A



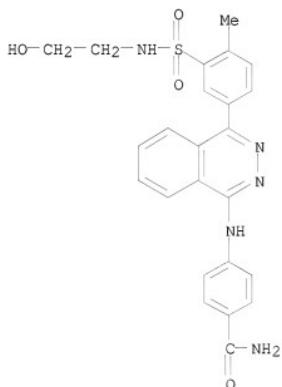
PAGE 2-A

$\begin{array}{c} \parallel \\ \text{O} \end{array}$

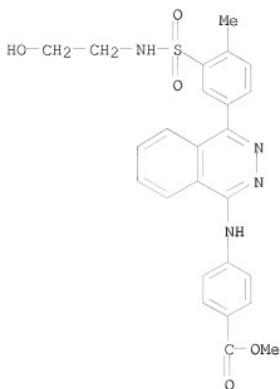
RN 375358-45-5 CAPLUS
 CN Acetanide, 2-[4-[4-[4-methyl-3-[(methylamino)sulfonyl]phenyl]-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)



RN 375360-16-0 CAPLUS
 CN Benzamide, 4-[[4-[3-[(2-hydroxyethyl)amino]sulfonyl]-4-methylphenyl]-1-phthalazinyl]amino]- (CA INDEX NAME)

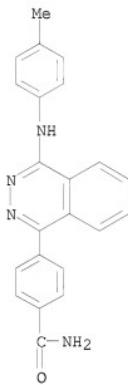


RN 375828-13-0 CAPLUS
 CN Benzoic acid, 4-[[4-[3-[(2-hydroxyethyl)amino]sulfonyl]-4-methylphenyl]-1-phthalazinyl]amino]-, methyl ester (CA INDEX NAME)



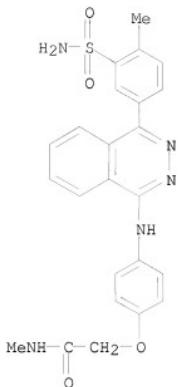
RN 375830-70-9 CAPLUS

CN Benzamide, 4-[4-[(4-methylphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

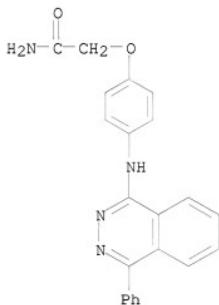


RN 375830-85-6 CAPLUS

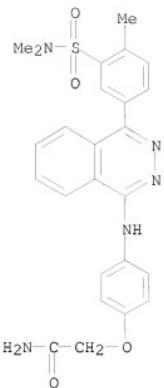
CN Acetamide, 2-[4-[(4-[(2-aminoacetyl)phenoxy]-1-phthalazinyl)-N-methylphenoxy]-N-methyl- (CA INDEX NAME)



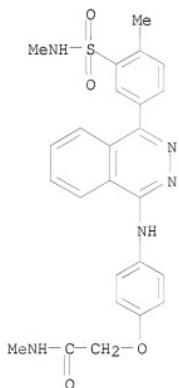
RN 375832-06-7 CAPLUS
CN Acetamide, 2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)



RN 375833-78-6 CAPLUS
CN Acetamide, 2-[4-[[4-[(dimethylamino)sulfonyl]-4-methylphenyl]-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)

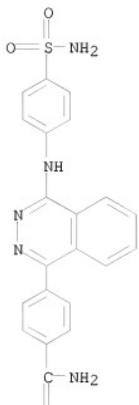


RN 375835-00-0 CAPLUS
CN Acetamide, N-methyl-2-[4-[(4-methyl-3-[(methylamino)sulfonyl]phenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)



RN 375840-32-7 CAPLUS
CN Benzamide, 4-[[4-(aminosulfonyl)phenyl]amino]-1-phthalazinyl- (CA INDEX NAME)

PAGE 1-A

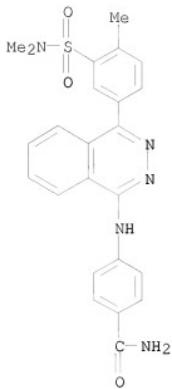


PAGE 2-A



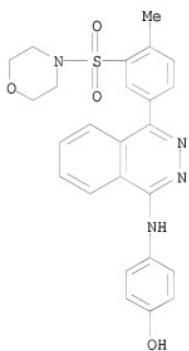
RN 375841-50-2 CAPLUS

CN Benzamide, 4-[(4-[(dimethylamino)sulfonyl]-4-methylphenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)



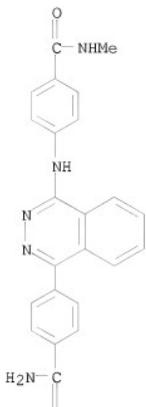
RN 376374-54-8 CAPLUS

CN Phenol, 4-[(4-methyl-3-(4-morpholinylsulfonyl)phenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)



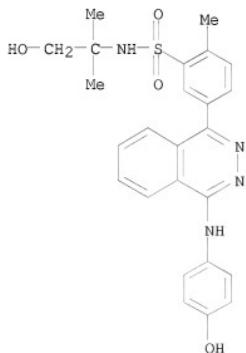
RN 397278-96-5 CAPLUS

CN Benzamide, 4-[(4-[(4-(aminocarbonyl)phenyl)-1-phthalazinyl]amino)-N-methyl- (CA INDEX NAME)

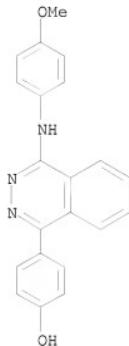


RN 488724-46-5 CAPLUS

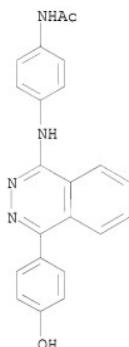
CN Benzenesulfonamide, N-(2-hydroxy-1,1-dimethylethyl)-5-[4-
hydroxyphenyl]amino]-1-phthalazinyl-2-methyl- (CA INDEX NAME)



RN 496773-16-1 CAPLUS
CN Phenol, 4-[4-[(4-methoxyphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

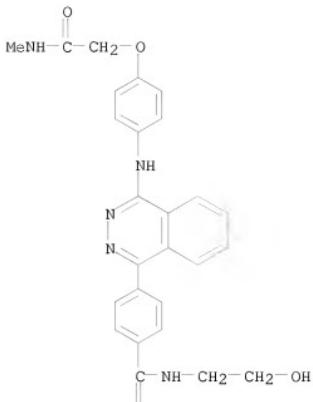


RN 510759-89-4 CAPLUS
CN Acetamide, N-[4-[(4-hydroxyphenyl)-1-phthalazinyl]amino]phenyl]- (CA INDEX NAME)



RN 931104-77-7 CAPLUS
CN Benzamide, N-(2-hydroxyethyl)-4-[4-[(4-[(2-(methylamino)-2-oxoethoxy]phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A

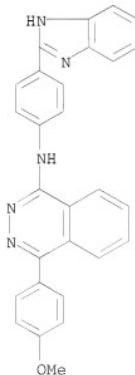


PAGE 2-A



RN 931104-78-8 CAPLUS

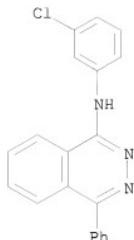
CN 1-Phthalazinamine, N-[4-(1H-benzimidazol-2-yl)phenyl]-4-(4-methoxyphenyl)-
(CA INDEX NAME)



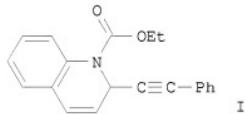
L6 ANSWER 8 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:289471 CAPLUS
 DOCUMENT NUMBER: 148:299956
 TITLE: Use of acetylsalicylic acid (ASA) in combination with MRP4 channel inhibitors for the treatment of diseases related to ASA resistance
 INVENTOR(S): Pulcinelli, Fabio Maria; Frati, Luigi; Mattiello, Teresa
 PATENT ASSIGNEE(S): Universita Degli Studi Di Roma La Sapienza, Italy
 SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2008026234 | A2 | 20080306 | WO 2007-IT597 | 20070830 |
| WO 2008026234 | A3 | 20080821 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |

PRIORITY APPLN. INFO.: IT 2006-RM460 A 20060831
 AB The invention relates to the use of acetylsalicylic acid (ASA) in combination with MRP4 channel inhibitors for the treatment of diseases related to so-called ASA resistance. Particularly preferred among the MRP4 channel inhibitors is dipyridamole. The invention also relates to an in-vitro diagnostic method for identifying ASA-resistant patients and to an associated kit for implementing the diagnostic method.
 IT 78351-75-4, MY-5445
 RL: PAC (Pharmacological activity); BIOL (Biological study)
 (acetylsalicylic acid in combination with MRP4 channel inhibitors for treatment of diseases related to acetylsalicylic acid resistance)
 RN 78351-75-4 CAPLUS
 CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 9 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:90359 CAPLUS
 DOCUMENT NUMBER: 148:262464
 TITLE: Copper-Catalyzed Coupling of Pyridines and Quinolines with Alkynes: A One-Step, Asymmetric Route to Functionalized Heterocycles
 AUTHOR(S): Black, Daniel A.; Beveridge, Ramsay E.; Arndtsen, Bruce A.
 CORPORATE SOURCE: Department of Chemistry, McGill University, Montreal, QC, H3A 2K6, Can.
 SOURCE: Journal of Organic Chemistry (2008), 73(5), 1906-1910
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 148:262464
 GI



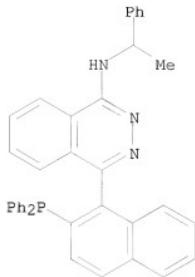
AB A copper (I)-catalyzed, asym. method to directly functionalize pyridines, quinolines, and isoquinolines with terminal alkynes is described. The reaction is readily diversified to incorporate a range of pyridine-based heterocycles and electron-rich or electron-poor alkynes. This provides a straightforward alternative to nucleophilic or cross-coupling approaches to directly derivatize these heterocycles, and yields useful propargylcarbamates, e.g., I.

IT 828927-96-4 862307-37-7

RL: CAT (Catalyst use); USES (Uses)
 (stereoselective preparation of dihydroquinoline- and dihydroisoquinoline-propargylcarbamates via copper-catalyzed alkynylation of chloroformates, terminal alkynes, and quinolines or isoquinolines employing chiral phosphine ligands)

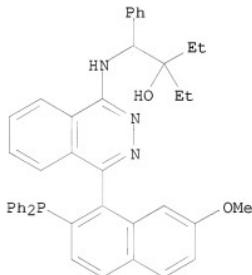
RN 828927-96-4 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (1S)- (CA INDEX NAME)



RN 862307-37-7 CAPLUS

CN Benzeneethanol, β-[(4S)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]-α,α-diethyl-, (BS)- (CA INDEX NAME)



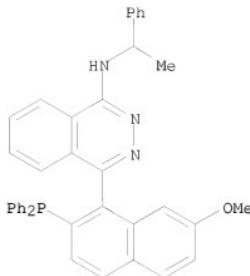
IT 870814-58-7P 1007403-67-9P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

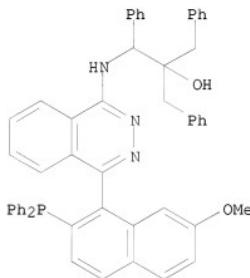
(stereoselective preparation of dihydroquinoline- and dihydroisoquinoline-propargylcarbamates via copper-catalyzed alkynylation of chloroformates, terminal alkynes, and quinolines or isoquinolines employing chiral phosphine ligands)

RN 870814-58-7 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (4S)- (CA INDEX NAME)

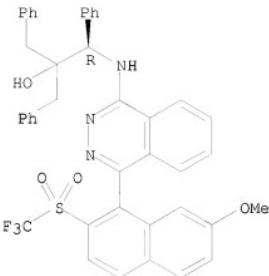


RN 1007403-67-9 CAPLUS
 CN Benzeneethanol, β -[[(4S)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]- α,α -bis(phenylmethyl)-,
 (βS) - (CA INDEX NAME)



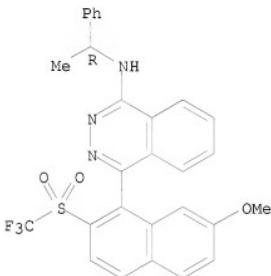
IT 1007363-86-1P 1007363-87-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (stereoselective preparation of dihydroquinoline- and
 dihydroisoquinoline-propargylcarbamates via copper-catalyzed
 alkynylation of chloroformates, terminal alkynes, and quinolines or
 isoquinolines employing chiral phosphine ligands)
 RN 1007363-86-1 CAPLUS
 CN Benzeneethanol, β -[[(4-[7-methoxy-2-[(trifluoromethyl)sulfonyl]-1-naphthalenyl]-1-phthalazinyl]amino]- α,α -bis(phenylmethyl)-,
 (βR) - (CA INDEX NAME)

Absolute stereochemistry.



RN 1007363-87-2 CAPLUS
 CN 1-Phtalazinamine, 4-[7-methoxy-2-[(trifluoromethyl)sulfonyl]-1-naphthalenyl]-N-[(1R)-1-phenylethyl] (CA INDEX NAME)

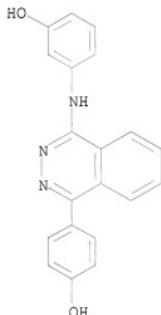
Absolute stereochemistry.



REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:59059 CAPLUS
 DOCUMENT NUMBER: 148:276126
 TITLE: Discovery of novel α -glucosidase inhibitors based on the virtual screening with the homology-modeled protein structure
 AUTHOR(S): Park, Hwangseo; Hwang, Kyo Yeol; Oh, Kyung Hwan; Kim, Young Hoon; Lee, Jae Yeon; Kim, Keun
 CORPORATE SOURCE: Department of Bioscience and Biotechnology, Sejong University, 98 Kunja-Dong, Kwangjin-Ku, Seoul, 143-747, S. Korea
 SOURCE: Bioorganic & Medicinal Chemistry (2008), 16(1), 284-292
 CODEN: BMECEP; ISSN: 0968-0896
 PUBLISHER: Elsevier Ltd.
 DOCUMENT TYPE: Journal

LANGUAGE: English
AB Discovery of α -glucosidase inhibitors has been actively pursued with the aim to develop therapeutics for the treatment of diabetes and the other carbohydrate mediated diseases. The authors have been able to identify 13 novel α -glucosidase inhibitors by means of a computer-aided drug design protocol involving homol. modeling of the target protein and the virtual screening with docking simulations under consideration of the effects of ligand solvation in the binding free energy function. Because the newly discovered inhibitors are structurally diverse and reveal a significant potency with IC₅₀ values lower than 50 μ M, all of them can be considered for further development by structure-activity relationship studies or de novo design methods. Structural features relevant to the interactions of the newly identified inhibitors with the active site residues of α -glucosidase are discussed in detail.
IT 499211-85-7
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(discovery of novel α -glucosidase inhibitors based on virtual screening with the homol.-modeled protein structure)
RN 499211-85-7 CAPLUS
CN Phenol, 3-[(4-(4-hydroxyphenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1300702 CAPLUS
DOCUMENT NUMBER: 147:541891
TITLE: Compositions and treatments using pyridazine compounds and secretases inhibitors and their preparation
INVENTOR(S): Watterson, Martin; Van Eldik, Linda; Hu, Wenhui
PATENT ASSIGNEE(S): Neuromedix, Inc., Can.
SOURCE: PCT Int. Appl., 234pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

WO 2007130383
WO 2007130383

A2 20071115
A3 20080619

WO 2007-US10510

20070427

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB,
GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,
KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.:

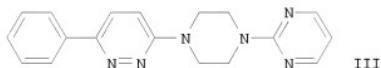
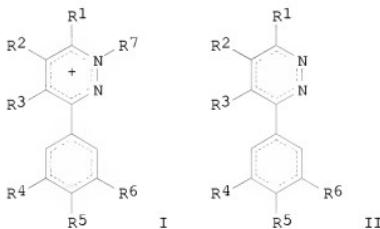
US 2006-796005P

P 20060428

OTHER SOURCE(S):

CASREACT 147:541891; MARPAT 147:541891

GI



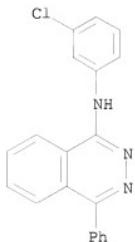
AB The invention relates to compns., conjugates and methods comprising pyridazine compds. of formula I and II and secretase inhibitors for modulation of cellular pathways (e.g., signal transduction pathways), for treatment or prevention of inflammatory diseases (e.g., Alzheimer's disease), for research, drug screening, and therapeutic applications. Compds. of formula I and II wherein R1, R2, R3, and R7 are independently H, OH and derivs., (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, alkylene, etc.; R4, R5, and R6 are independently H, alkyl, alkoxy, halo, NO₂; and their pharmaceutically acceptable salts thereof, are claimed. Example compound III was prepared by substitution of 2-chloro-6-phenylpyridazine with 2-(piperazin-1-yl)pyrimidine. All the invention compds. were evaluated for their secretase inhibitory activity.

IT 78351-75-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

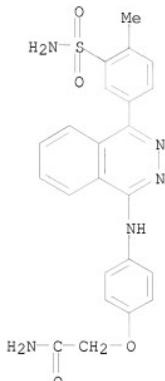
(drug candidate; preparation of pyridazine compds. and secretase inhibitors

as modulators of signal transduction pathways useful in combination therapy and prevention of inflammatory diseases)
RN 78351-75-4 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 12 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1095263 CAPLUS
DOCUMENT NUMBER: 147:514373
TITLE: Small Molecule Inhibitors of the MDM2-p53 Interaction
Discovered by Ensemble-Based Receptor Models
Bowman, Anna L.; Nikolovska-Coleska, Zaneta; Zhong,
Haizhen; Wang, Shaomeng; Carlson, Heather A.
Departments of Medicinal Chemistry and Internal
Medicine and the Comprehensive Cancer Center,
University of Michigan, Ann Arbor, MI, 48109, USA
Journal of the American Chemical Society (2007),
129(42), 12809-12814
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Five nonpeptide, small-mol. inhibitors of the human MDM2-p53 interaction
are presented, and each inhibitor represents a new scaffold. The most
potent compound exhibited a K_i of 110 ± 30 nM. These compds. were
identified using our multiple protein structure (MPS) method which
incorporates protein flexibility into a receptor-based pharmacophore model
that identifies appropriate hotspots of binding. Docking the inhibitors
with an induced-fit docking protocol suggested that the inhibitors
mimicked the three critical binding residues of p53 (Phe19, Trp23, and
Leu26). Docking also predicted a new orientation of the scaffolds that
more fully fills the binding cleft, enabling the inhibitors to take
advantage of addnl. hydrogen-bonding possibilities not explored by other
small mol. inhibitors. One inhibitor in particular was proposed to probe
the hydrophobic core of the protein by taking advantage of the flexibility
of the binding cleft floor. These results show that the MPS technique is
a promising advance for structure-based drug discovery and that the method
can truly explore broad chemical space efficiently in the quest to discover
potent, small-mol. inhibitors of protein-protein interactions. Our MPS
techniques one of very few ensemble-based techniques to be proven through
exptl. verification of the discovery of new inhibitors.
IT 374922-26-6
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic
use); BIOL (Biological study); USES (Uses)
(small mol. inhibitors of MDM2-p53 interaction discovered by

ensemble-based receptor models)
RN 374922-26-6 CAPLUS
CN Acetamide, 2-[4-[(4-(aminosulfonyl)-4-methylphenyl)-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)



REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:845492 CAPLUS
DOCUMENT NUMBER: 147:235186
TITLE: Preparation of substituted phthalazinamines as Aurora kinase modulators
INVENTOR(S): Gee, Victor J.; Deak, Holly L.; Du, Bingfan; Geuns-Meyer, Stephanie D.; Hodous, Brian L.; Nguyen, Hanh Nho; Olivieri, Philip R.; Patel, Vinod F.; Romero, Karina; Schenkel, Laurie
PATENT ASSIGNEE(S): Amgen Inc., USA
SOURCE: PCT Int. Appl., 189pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2007087276 | A1 | 20070802 | WO 2007-US1714 | 20070122 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, RU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, | | | |

| | | | | |
|--|----|----------|-----------------|------------|
| CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KB, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM | | | | |
| US 20070185111 | A1 | 20070809 | US 2007-655642 | 20070118 |
| AU 2007208351 | A1 | 20070802 | AU 2007-208351 | 20070122 |
| CA 2637658 | A1 | 20070802 | CA 2007-2637658 | 20070122 |
| EP 1984353 | A1 | 20081029 | EP 2007-716912 | 20070122 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
BA, HR, MK, | RS | | | |
| MX 2008009285 | A | 20080731 | MX 2008-9285 | 20080718 |
| IN 2008CN03798 | A | 20090313 | IN 2008-CN3/98 | 20080721 |
| NO 2008003639 | A | 20081022 | NO 2008-3639 | 20080822 |
| KR 2008095889 | A | 20081029 | KR 2008-720677 | 20080822 |
| PRIORITY APPLN. INFO.: | | | US 2006-761675P | P 20060123 |
| | | | US 2007-655642 | A 20070118 |
| | | | WO 2007-US1714 | W 20070122 |

OTHER SOURCE(S): MARPAT 147:235186
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

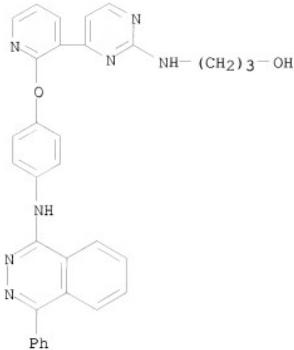
AB The title compds. I [A1, A2 = N or CR9 (provided that at least one of A1 and A2 = N); C1 = N or CR10; C2 = N or CH; D = (un)substituted 5-6 membered (hetero)aryl; L1, L2 = NR3, O, S, etc.; Z = fully unsatd. 5-6 membered monocyclic ring optionally containing 1-3 heteroatoms, etc.; R3, R4 = (un)substituted SH, OH, NH2, etc.; R6-R10 = (un)substituted SH, OH, NH2, etc.] which are capable of modulating various protein kinase receptor enzymes and, thereby, influencing various disease states and conditions related to the activities of such kinases, were prepared. Thus, reacting 4-[2-(4-aminophenoxy)pyridin-3-yl]-N-methylpyridin-2-amine with 1-chloro-4-phenylphthalazine afforded II. The compds. I are capable of modulating Aurora kinase thereby influencing the process of cell cycle and cell proliferation to treat cancer and cancer-related diseases. The invention also includes pharmaceutical compds., including the compds. I, and methods of treating disease states related to the activity of Aurora kinase.

IT 945598-14-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of substituted phthalazinamines as Aurora kinase modulators)

RN 945598-14-1 CAPLUS

CN 1-Propanol, 3-[(4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl)amino]- (CA INDEX NAME)



| | | | |
|----|--------------|--------------|--------------|
| IT | 945595-27-7P | 945595-30-2P | 945595-35-7P |
| | 945595-37-9P | 945595-38-0P | 945595-39-1P |
| | 945595-41-5P | 945595-46-0P | 945595-47-1P |
| | 945595-49-3P | 945595-50-6P | 945595-51-7P |
| | 945595-55-1P | 945595-59-5P | 945595-60-8P |
| | 945595-61-9P | 945595-62-0P | 945595-63-1P |
| | 945595-64-2P | 945595-67-5P | 945595-68-6P |
| | 945595-69-7P | 945595-70-0P | 945595-71-1P |
| | 945595-72-2P | 945595-79-9P | 945595-81-3P |
| | 945595-82-4P | 945595-84-6P | 945596-20-3P |
| | 945596-22-5P | 945596-24-7P | 945596-26-9P |
| | 945596-46-3P | 945596-52-1P | 945596-53-2P |
| | 945596-55-4P | 945596-56-5P | 945596-57-6P |
| | 945596-66-7P | 945596-67-8P | 945596-68-9P |
| | 945596-70-3P | 945596-78-1P | 945596-81-6P |
| | 945596-82-7P | 945596-85-0P | 945596-86-1P |
| | 945596-87-2P | 945596-88-3P | 945596-89-4P |
| | 945597-00-2P | 945597-20-6P | 945597-21-7P |
| | 945597-22-8P | 945597-23-9P | 945597-24-0P |
| | 945597-25-1P | 945597-29-5P | 945597-31-9P |
| | 945597-34-2P | 945597-35-3P | 945597-36-4P |
| | 945597-37-5P | 945597-38-6P | 945597-39-7P |
| | 945597-41-1P | 945597-48-8P | 945597-59-1P |
| | 945597-61-5P | 945597-63-7P | 945597-67-1P |
| | 945597-71-7P | 945597-74-0P | 945597-75-1P |
| | 945597-80-8P | 945597-81-9P | 945597-85-3P |
| | 945597-86-4P | 945597-89-7P | 945597-93-3P |
| | 945597-95-5P | 945597-96-6P | 945597-99-9P |
| | 945598-00-5P | 945598-01-6P | 945598-03-8P |
| | 945598-04-9P | 945598-05-0P | 945598-06-1P |
| | 945598-07-2P | 945598-08-3P | 945598-10-7P |
| | 945598-11-8P | 945598-12-9P | 945598-13-0P |
| | 945598-15-2P | 945598-16-3P | 945598-17-4P |
| | 945598-18-5P | 945598-19-6P | 945598-21-0P |
| | 945598-22-1P | 945598-24-3P | 945598-26-5P |
| | 945598-31-2P | 945598-33-4P | 945598-36-7P |
| | 945598-37-8P | 945598-38-9P | 945598-39-0P |
| | 945598-40-3P | 945598-42-5P | 945598-43-6P |
| | 945598-46-9P | 945598-47-0P | 945598-48-1P |

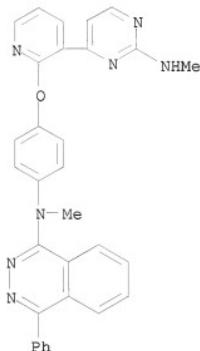
945598-49-2P 945598-52-7P 945598-55-0P
945598-58-3P 945598-60-7P 945598-74-3P
945598-77-6P 945598-85-6P 945598-87-8P
945598-93-6P 945598-99-2P 945599-03-1P
945599-07-5P 945599-08-6P 945599-09-7P
945599-12-2P 945599-13-3P 945599-18-8P
945599-19-9P 945599-23-5P 945599-63-3P
945599-71-3P 945599-75-7P 945599-76-8P
945599-99-5P 945600-43-1P 945600-46-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted phthalazinamines as Aurora kinase modulators)

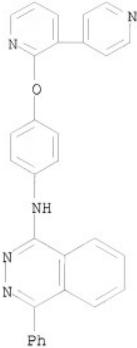
RN 945595-27-7 CAPLUS

CN 1-**P**htalazinamine, N-methyl-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



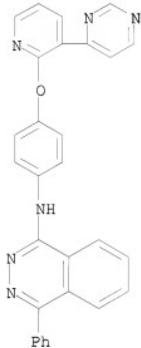
RN 945595-30-2 CAPLUS

CN 1-**P**htalazinamine, N-[4-((3,4'-bipyridinyl-2-yl)oxy)phenyl]-4-phenyl- (CA INDEX NAME)



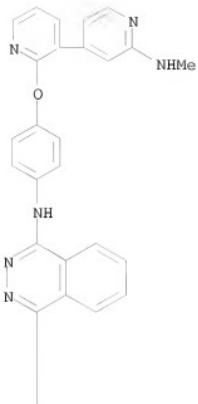
RN 945595-35-7 CAPLUS

CN 1-Phtalazinamine, 4-phenyl-N-[4-[(3-(4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

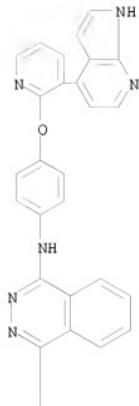


RN 945595-37-9 CAPLUS

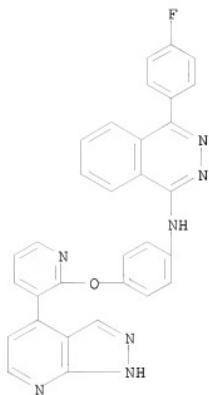
CN 1-Phtalazinamine, 4-(4-fluorophenyl)-N-[4-[(2'-(methylamino)[3,4'-bipyridin]-2-yl]oxy]phenyl]- (CA INDEX NAME)



RN 945595-38-0 CAPLUS
CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[4-[(3-(1H-pyrrolo[2,3-b]pyridin-4-yl)-2-pyridinyl)oxy]phenyl]- (CA INDEX NAME)

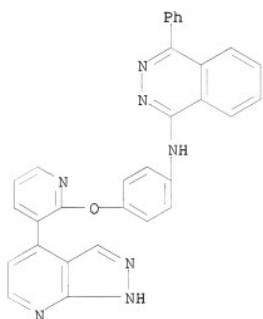


RN 945595-39-1 CAPLUS
CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[4-[(3-(1H-pyrazolo[3,4-b]pyridin-4-yl)-2-pyridinyl)oxy]phenyl]- (CA INDEX NAME)



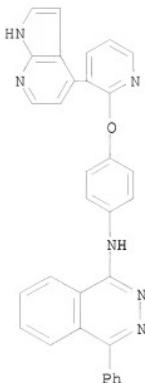
RN 945595-41-5 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-[(3-(1H-pyrazolo[3,4-b]pyridin-4-yl)-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

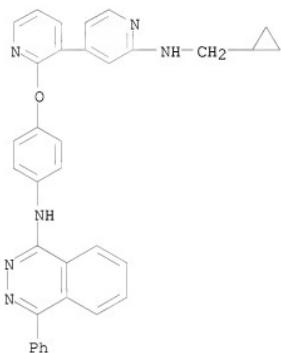


RN 945595-46-0 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-[(3-(1H-pyrrolo[2,3-b]pyridin-4-yl)-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

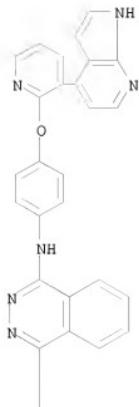


RN 945595-47-1 CAPLUS
CN 1-Phtalazinamine, N-[4-[(2'-(cyclopropylmethyl)amino){3,4'-bipyridin}-2-yl]oxy]phenyl- (CA INDEX NAME)



RN 945595-49-3 CAPLUS
CN 1-Phtalazinamine, 4-(3-chlorophenyl)-N-[4-[[3-(1H-pyrrolo[2,3-b]pyridin-4-yl)-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

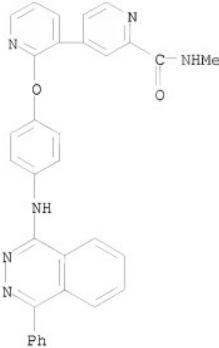


PAGE 2-A

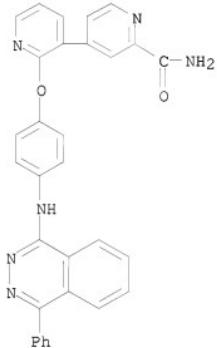


RN 945595-50-6 CAPLUS

CN [3,4'-Bipyridine]-2'-carboxamide, N-methyl-2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)

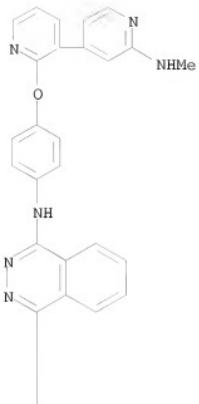


RN 945595-51-7 CAPLUS
CN [3,4'-Bipyridine]-2'-carboxamide, 2-[4-[1-(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)



RN 945595-55-1 CAPLUS
CN 1-Phthalazinamine, N-[4-[(2'-(methylamino)(3,4'-bipyridin)-2-yl)oxy]phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A

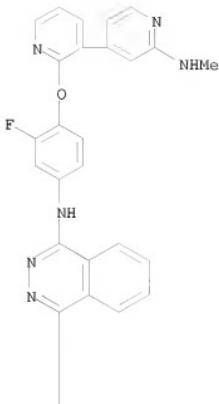


PAGE 2-A



RN 945595-59-5 CAPLUS
CN 1-Phthalazinamine, N-(3-fluoro-4-[(2'-(methylamino)[3,4'-bipyridin]-2-yl]oxy)phenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)

PAGE 1-A



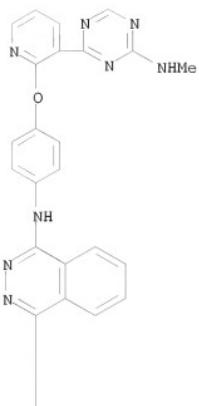
PAGE 2-A



RN 945595-60-8 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-[4-(methylamino)-1,3,5-triazin-2-yl]-2-pyridinyl)oxy]phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A



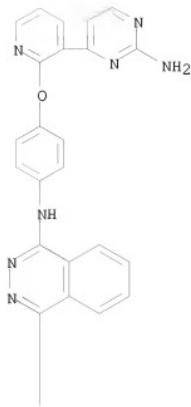
PAGE 2-A



RN 945595-61-9 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(4-fluorophenyl)- (CA INDEX NAME)

PAGE 1-A



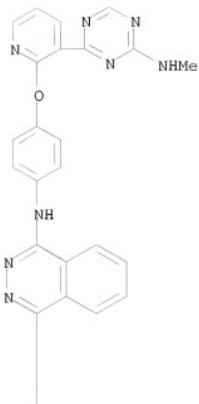
PAGE 2-A



RN 945595-62-0 CAPLUS

CN 1-Phtalazinamine, 4-(4-fluorophenyl)-N-[4-[(3-[(4-(methylamino)-1,3,5-triazin-2-yl]-2-pyridinyl]oxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



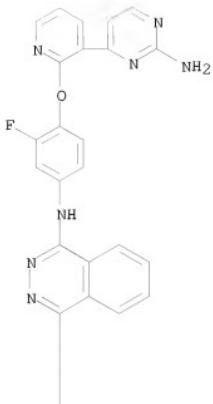
PAGE 2-A



RN 945595-63-1 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]-3-fluorophenyl]-4-(4-fluorophenyl)- (CA INDEX NAME)

PAGE 1-A



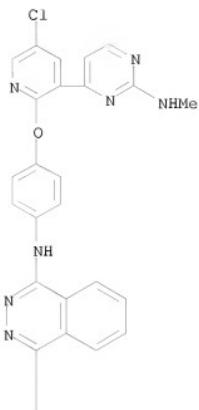
PAGE 2-A



RN 945595-64-2 CAPLUS

CN 1-Phthalazinamine, N-[4-[(5-chloro-3-(2-(methylamino)-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(4-fluorophenyl)- (CA INDEX NAME)

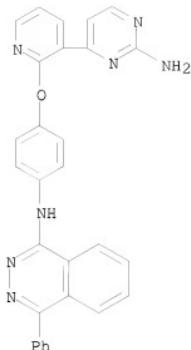
PAGE 1-A



PAGE 2-A

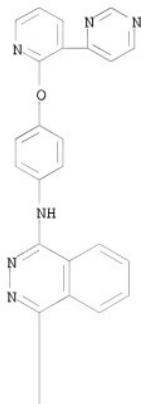


RN 945595-67-5 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 945595-68-6 CAPLUS
CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[4-[13-(4-pyrimidinyl)-2-pyridinyl]oxy]phenyl- (CA INDEX NAME)

PAGE 1-A

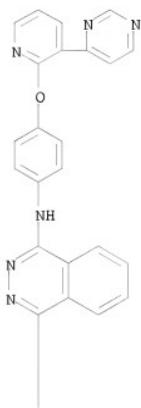


PAGE 2-A



RN 945595-69-7 CAPLUS
CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[4-[[3-(4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

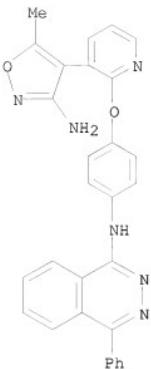
PAGE 1-A



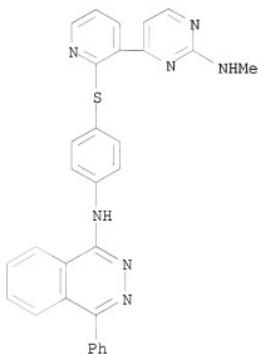
PAGE 2-A



RN 945595-70-0 CAPLUS
CN 1-Phtalazinamine, N-[4-[[3-(3-amino-5-methyl-4-isoxazolyl)-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)

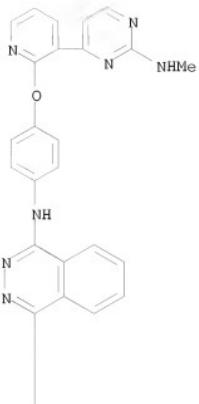


RN 945595-71-1 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]thio]phenyl-4-phenyl- (CA INDEX NAME)

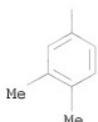


RN 945595-72-2 CAPLUS
CN 1-Phthalazinamine, 4-(3,4-dimethylphenyl)-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl- (CA INDEX NAME)

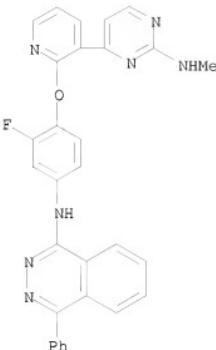
PAGE 1-A



PAGE 2-A

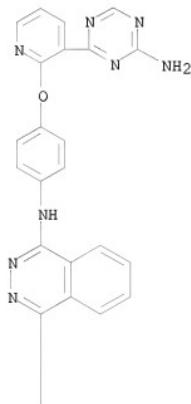


RN 945595-79-9 CAPLUS
CN 1-Phtalazinamine, N-[3-fluoro-4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



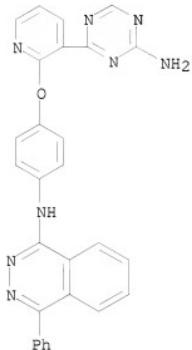
RN 945595-81-3 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-(4-amino-1,3,5-triazin-2-yl)-2-pyridinyl)oxy]phenyl]-4-(4-fluorophenyl)- (CA INDEX NAME)

PAGE 1-A

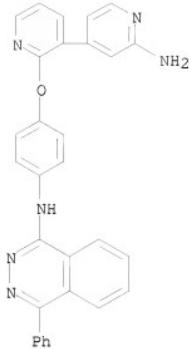




RN 945595-82-4 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-(4-amino-1,3,5-triazin-2-yl)-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)

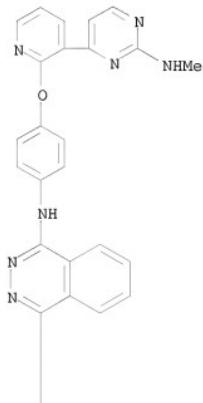


RN 945595-84-6 CAPLUS
CN 1-Phthalazinamine, N-[4-[(2'-amino[3,4'-bipyridin]-2-yl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)

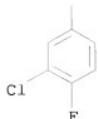


RN 945596-20-3 CAPLUS
CN 1-Phthalazinamine, 4-(3-chloro-4-fluorophenyl)-N-[4-[(3-[(2-(methylamino)-4-pyrimidinyl]2-pyridinyl]oxyphenyl]- (CA INDEX NAME)

PAGE 1-A

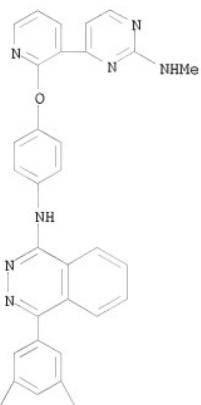


PAGE 2-A



RN 945596-22-5 CAPLUS
CN 1-Phthalazinamine, 4-[3,5-bis(trifluoromethyl)phenyl]-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

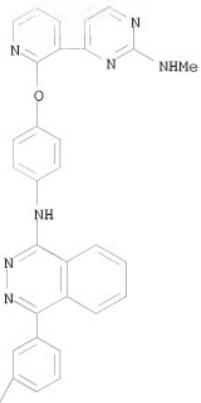


PAGE 2-A



RN 945596-24-7 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

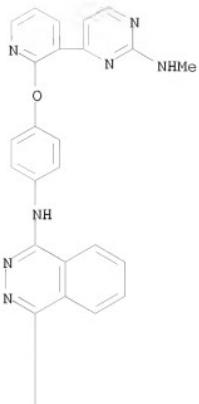


PAGE 2-A

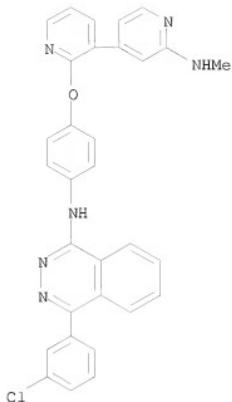
F₃C

RN 945596-26-9 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-(4-(trifluoromethyl)phenyl)- (CA INDEX NAME)

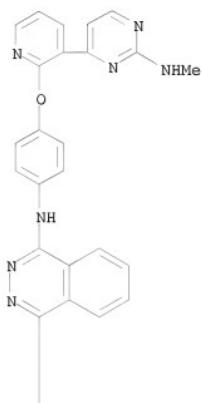


RN 945596-46-3 CAPLUS
CN 1-Phthalazinamine, 4-(3-chlorophenyl)-N-[4-[(2'-(methylamino)[3,4'-biphenyl-2-yl]oxy)phenyl]- (CA INDEX NAME)



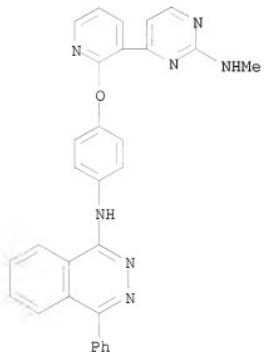
RN 945596-52-1 CAPLUS
CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[4-[(3-(2-(methylamino)-4-pyrimidinyl)2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

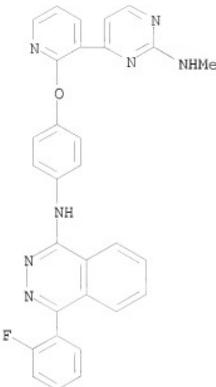




RN 945596-53-2 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)

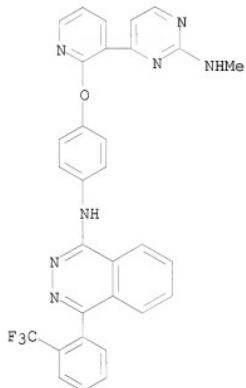


RN 945596-55-4 CAPLUS
CN 1-Phthalazinamine, 4-(2-fluorophenyl)-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)



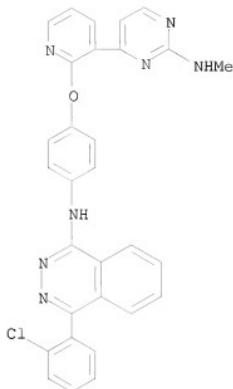
RN 945596-56-5 CAPLUS

CN 1-Phtalazinamine, N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxylphenyl]-4-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

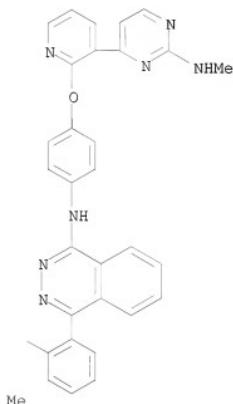


RN 945596-57-6 CAPLUS

CN 1-Phtalazinamine, 4-(2-chlorophenyl)-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxylphenyl]- (CA INDEX NAME)

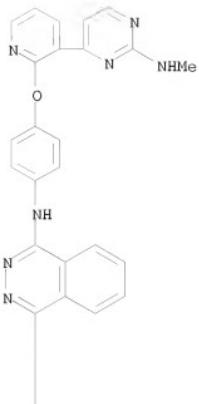


RN 945596-66-7 CAPLUS
CN 1-Phtalazinamine, N-[4-[(3-[(2-(methylamino)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]-4-(3-methylphenyl)- (CA INDEX NAME)



RN 945596-67-8 CAPLUS
CN 1-Phtalazinamine, N-[4-[(3-[(2-(methylamino)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A



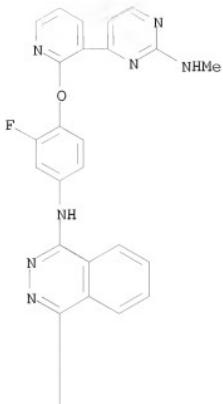
PAGE 2-A



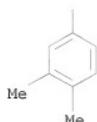
RN 945596-68-9 CAPLUS

CN 1-Phtalazinamine, 4-(3,4-dimethylphenyl)-N-[3-fluoro-4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

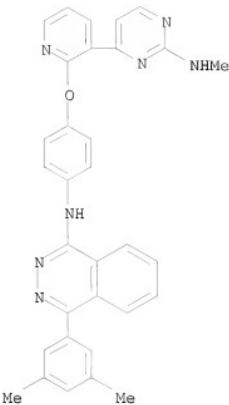


PAGE 2-A



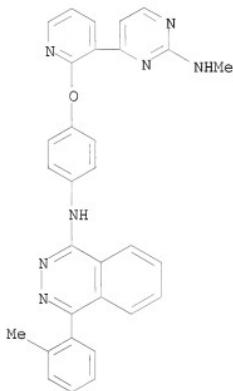
RN 945596-70-3 CAPLUS

CN 1-Phtalazinamine, 4-(3,5-dimethylphenyl)-N-[4-[(3-(2-(methylamino)-4-pyrimidinyl)2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)



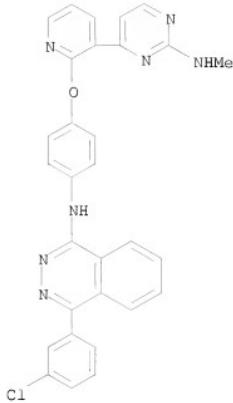
RN 945596-78-1 CAPLUS

CN 1-Phtalazinamine, N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-(2-methylphenyl)- (CA INDEX NAME)



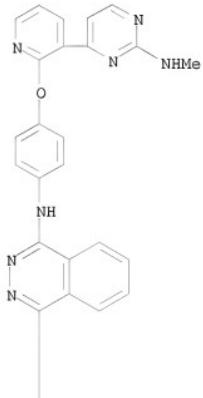
RN 945596-81-6 CAPLUS

CN 1-Phtalazinamine, 4-(3-chlorophenyl)-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)



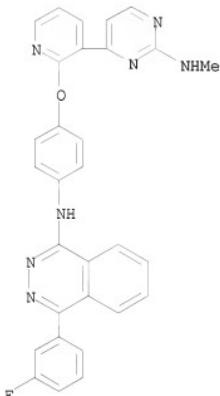
RN 945596-82-7 CAPLUS
CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(3-[(2-(methylamino)-4-pyrimidinyl]2-pyridinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



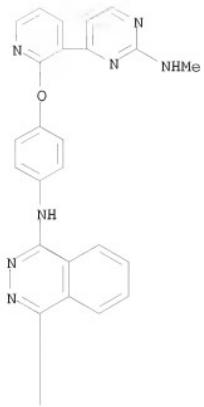


RN 945596-85-0 CAPLUS
CN 1-Phtalazinamine, 4-(3-fluorophenyl)-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

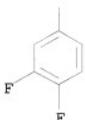


RN 945596-86-1 CAPLUS
CN 1-Phtalazinamine, 4-(3,4-difluorophenyl)-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



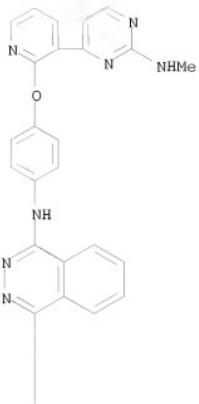
PAGE 2-A



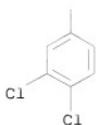
RN 945596-87-2 CAPLUS

CN 1-Phthalazinamine, 4-(3,4-dichlorophenyl)-N-[4-[(3-[(2-(methylamino)-4-pyrimidinyl]2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A



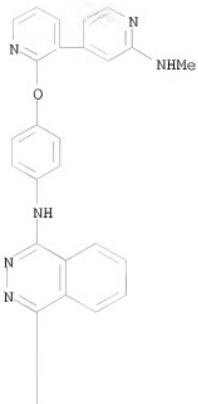
PAGE 2-A



RN 945596-88-3 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[4-[(2'-(methylamino)(3,4'-bipyridin)-2-yl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

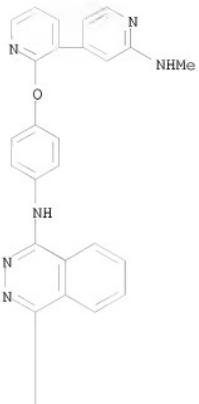


PAGE 2-A

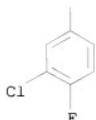


RN 945596-89-4 CAPLUS
CN 1-Phthalazinamine, 4-(3-chloro-4-fluorophenyl)-N-(4-[(2'-(methylamino)(3,4'-bipyridin]-2-yl]oxy)phenyl]- (CA INDEX NAME)

PAGE 1-A



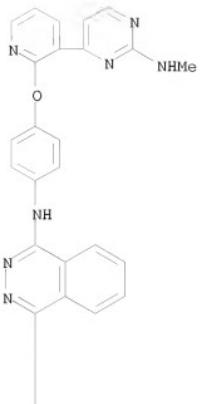
PAGE 2-A



RN 945597-00-2 CAPLUS

CN 1-Phtalazinamine, 4-(1H-indol-5-yl)-N-[4-[(3-[2-(methylamino)-4-pyrimidinyl]2-pyridinyl]oxy]phenyl]- (CA INDEX NAME)

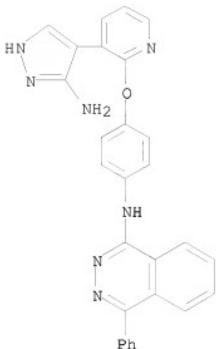
PAGE 1-A



PAGE 2-A

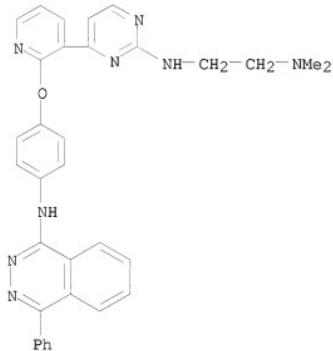


RN 945597-20-6 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-(3-amino-1H-pyrazol-4-yl)-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



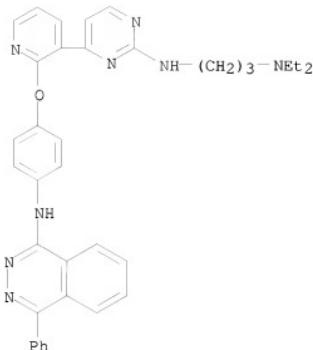
RN 945597-21-7 CAPLUS

CN 1,2-Ethanediamine, N1,N1-dimethyl-N2-[4-{2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy}-3-pyridinyl]-2-pyrimidinyl- (CA INDEX NAME)



RN 945597-22-8 CAPLUS

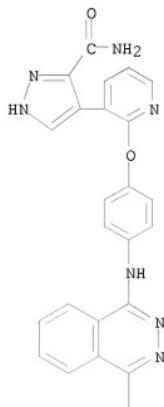
CN 1,3-Propanediamine, N1,N1-diethyl-N3-[4-{2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy}-3-pyridinyl]-2-pyrimidinyl- (CA INDEX NAME)



RN 945597-23-9 CAPLUS

CN 1H-Pyrazole-3-carboxamide, 4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]- (CA INDEX NAME)

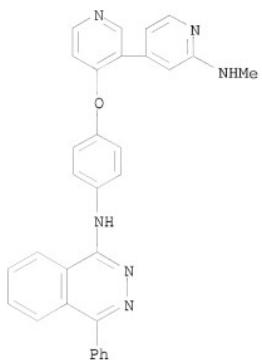
PAGE 1-A



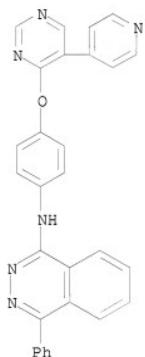
PAGE 2-A

|
Ph

RN 945597-24-0 CAPLUS
CN 1-Phthalazinamine, N-[4-[(2'-(methylamino)[3,4'-bipyridin]-4-yl]oxy]phenyl]- (CA INDEX NAME)

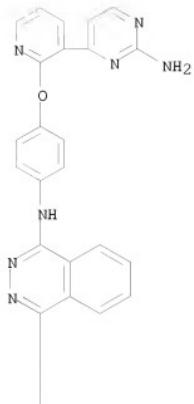


RN 945597-25-1 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[4-[(5-(4-pyridinyl)-4-pyrimidinyl)oxy]phenyl]- (CA INDEX NAME)

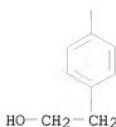


RN 945597-29-5 CAPLUS
CN Benzeneethanol, 4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A



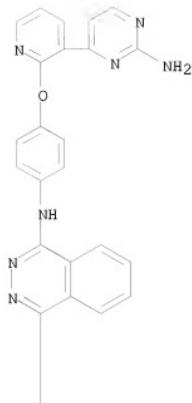
PAGE 2-A



RN 945597-31-9 CAPLUS

CN Benzenemethanol, 4-[4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]amino]-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A

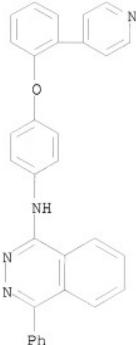


PAGE 2-A



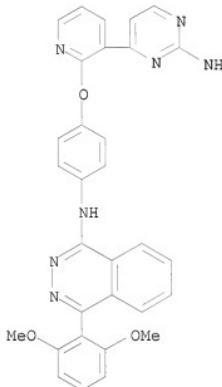
RN 945597-34-2 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-[2-(4-pyridinyl)phenoxy]phenyl]- (CA INDEX NAME)



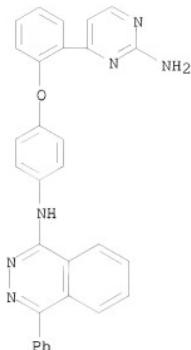
RN 945597-35-3 CAPLUS

CN 1-Phtalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(2,6-dimethoxyphenyl)- (CA INDEX NAME)



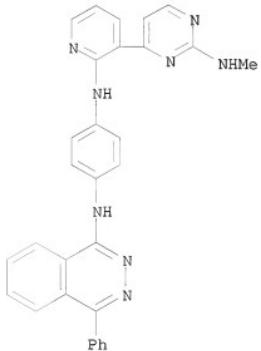
RN 945597-36-4 CAPLUS

CN 1-Phtalazinamine, N-[4-[(2-amino-4-pyrimidinyl)phenoxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 945597-37-5 CAPLUS

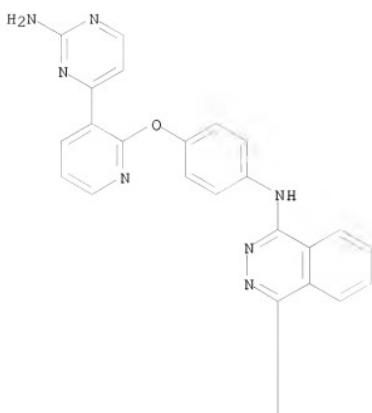
CN 1,4-Benzenediamine, N1-[3-[(2-(methylamino)-4-pyrimidinyl)-2-pyridinyl]-N4-(4-phenyl-1-phthalazinyl)- (CA INDEX NAME)



RN 945597-38-6 CAPLUS

CN Benzenemethanol, 4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy)phenyl]amino)-1-phthalazinyl]- α -methyl-, (α R)- (CA INDEX NAME)

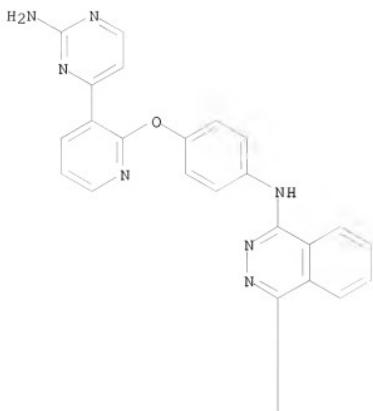
Absolute stereochemistry.



RN 945597-39-7 CAPLUS
 CN Benzenemethanol, 4-[4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl)amino]-1-phthalazinyl]- α -methyl-, (α S)-
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

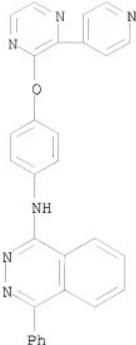


PAGE 2-A



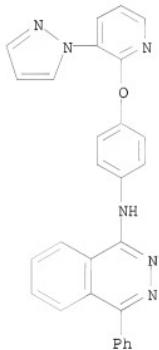
RN 945597-41-1 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-[[3-(4-pyridinyl)-2-pyrazinyl]oxy]phenyl]-
(CA INDEX NAME)



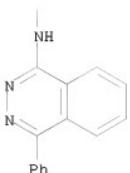
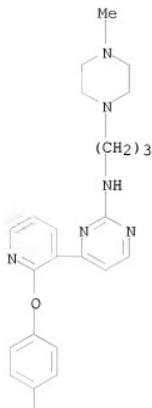
RN 945597-48-8 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-[(3-(1H-pyrazol-1-yl)-2-pyridinyl)oxy]phenyl]- (CA INDEX NAME)

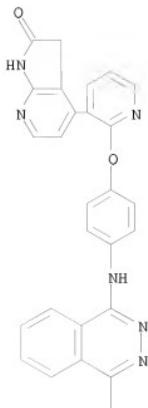


RN 945597-59-1 CAPLUS

CN 1-Phthalazinamine, N-[4-[(2-[(3-(4-methyl-1-piperazinyl)propyl]amino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)

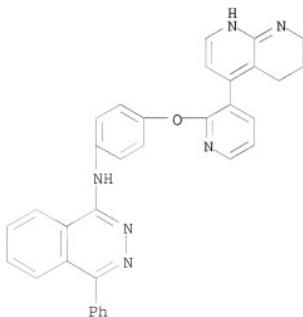


RN 945597-61-5 CAPLUS
CN 2H-Pyrrolo[2,3-b]pyridin-2-one, 1,3-dihydro-4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]- (CA INDEX NAME)



RN 945597-63-7 CAPLUS

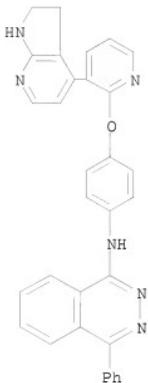
CN 1-Phthalazinamine, 4-phenyl-N-[4-[(3-(5,6,7,8-tetrahydro-1,8-naphthyridin-4-yl)-2-pyridinyl)oxyl]phenyl]- (CA INDEX NAME)



RN 945597-67-1 CAPLUS

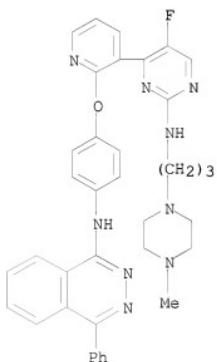
CN 1-Phthalazinamine, N-[4-[(3-(2,3-dihydro-1H-pyrrolo[2,3-b]pyridin-4-yl)-2-

pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



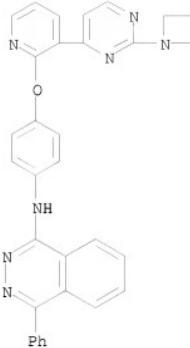
RN 945597-71-7 CAPLUS

CN 1-Phtalazinamine, N-[4-[(3-[5-fluoro-2-[(3-(4-methyl-1-piperazinyl)propyl]amino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



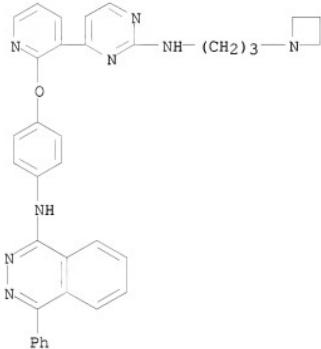
RN 945597-74-0 CAPLUS

CN 1-Phtalazinamine, N-[4-[(3-[2-(1-azetidinyl)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



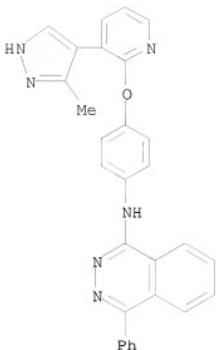
RN 945597-75-1 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-[(3-(1-azetidinyl)propyl]amino)-4-pyrimidinyl]-2-pyridinyl]oxyphenyl]-4-phenyl- (CA INDEX NAME)



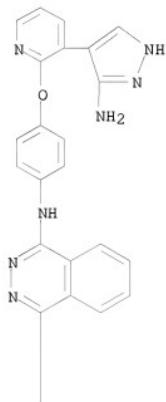
RN 945597-80-8 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(3-methyl-1H-pyrazol-4-yl)-2-pyridinyl]oxyphenyl]-4-phenyl- (CA INDEX NAME)



RN 945597-81-9 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-(3-amino-1H-pyrazol-4-yl)-2-pyridinyl)oxy]phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)

PAGE 1-A

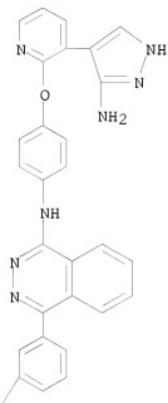


PAGE 2-A



RN 945597-85-3 CAPLUS
CN Benzenemethanol, 3-[4-[(3-(3-amino-1H-pyrazol-4-yl)-2-pyridinyl)oxy]phenyl]amino]-1-phthalazinyl- (CA INDEX NAME)

PAGE 1-A

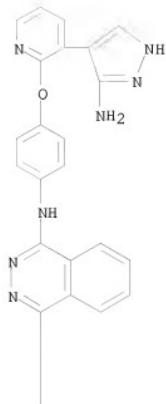


PAGE 2-A



RN 945597-86-4 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-(3-amino-1H-pyrazol-4-yl)-2-pyridinyl)oxy]phenyl]-4-(4-chlorophenyl)- (CA INDEX NAME)

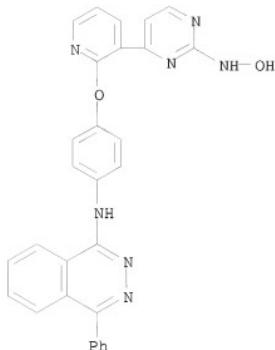
PAGE 1-A



PAGE 2-A

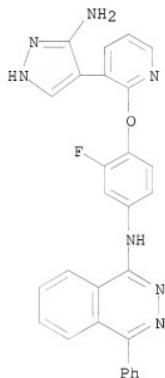


RN 945597-89-7 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-[2-(hydroxyamino)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 945597-93-3 CAPLUS

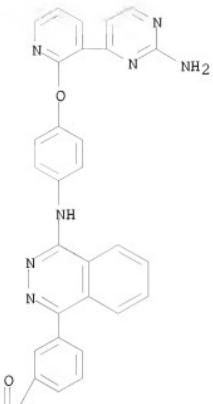
CN 1-Phthalazinamine, N-[4-[(3-(3-amino-1H-pyrazol-4-yl)-2-pyridinyl)oxy]-3-fluorophenyl]-4-phenyl- (CA INDEX NAME)



RN 945597-95-5 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-[3-(methylsulfonyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

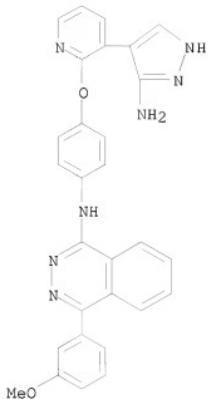


PAGE 2-A



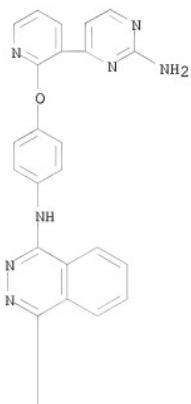
RN 945597-96-6 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(3-amino-1H-pyrazol-4-yl)-2-pyridinyl)oxy]phenyl]-4-(3-methoxyphenyl)- (CA INDEX NAME)



RN 945597-99-9 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]-4-(4-methoxyphenyl)- (CA INDEX NAME)

PAGE 1-A

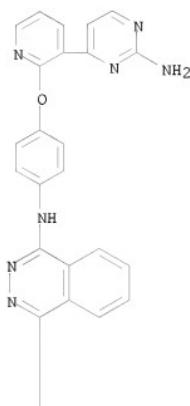


PAGE 2-A



RN 945598-00-5 CAPLUS
CN 1-Phtalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(4-ethoxyphenyl)- (CA INDEX NAME)

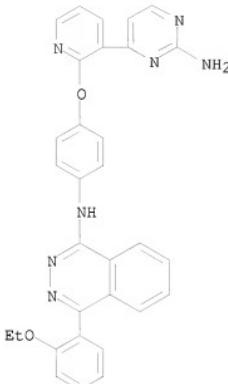
PAGE 1-A



PAGE 2-A

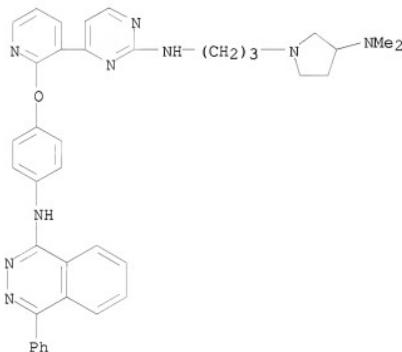


RN 945598-01-6 CAPLUS
CN 1-Phtalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(2-ethoxyphenyl)- (CA INDEX NAME)



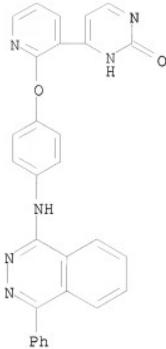
RN 945598-03-8 CAPLUS

CN 1-Phthalazinamine, N-[4-[(2-[(3-[(3-(dimethylamino)-1-pyrrolidinyl)propyl]amino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 945598-04-9 CAPLUS

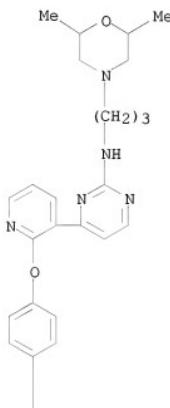
CN 2(1H)-Pyrimidinone, 4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]- (CA INDEX NAME)

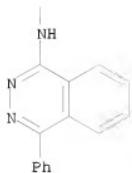


RN 945598-05-0 CAPLUS

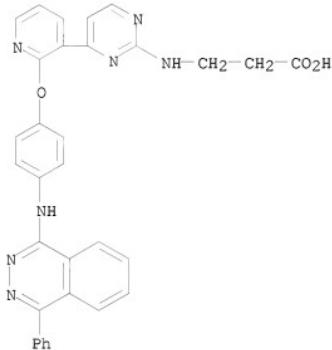
CN 1-Phthalazinamine, N-[4-[(3-{2-[(3-(2,6-dimethyl-4-morpholinyl)propyl)amino)-4-pyrimidinyl]-2-pyridinyl}oxy]phenyl]-4-phenyl-
(CA INDEX NAME)

PAGE 1-A





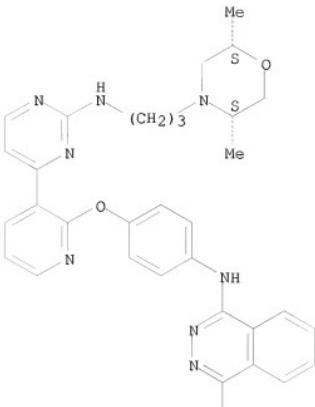
RN 945598-06-1 CAPLUS

CN β -Alanine, N-[4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 945598-07-2 CAPLUS

CN 1-Phtalazinamine, N-[4-[[3-[2-[[3-((2S,5S)-2,5-dimethyl-4-morpholinyl)propyl]amino]-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)

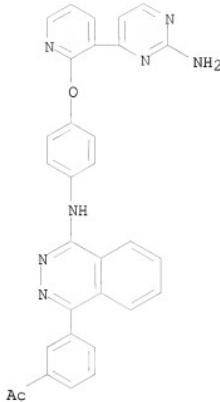
Absolute stereochemistry.



Ph

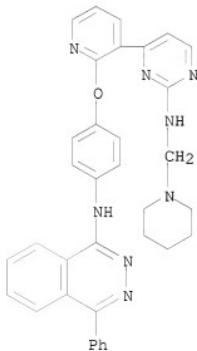
RN 945598-08-3 CAPLUS

CN Ethanone, 1-[3-[4-[3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]amino]-1-phthalazinylphenyl]- (CA INDEX NAME)



RN 945598-10-7 CAPLUS

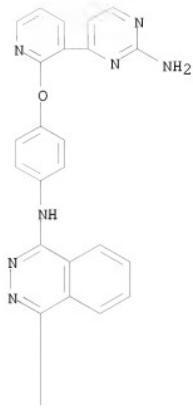
CN 1-Phthalazinamine, 4-phenyl-N-[4-[(3-[(2-[(1-piperidinylmethyl)amino]-4-pyrimidinyl]2-pyridinyl)oxy]phenyl]- (CA INDEX NAME)



RN 945598-11-8 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-[(dimethylamino)methyl]phenyl- (CA INDEX NAME)

PAGE 1-A

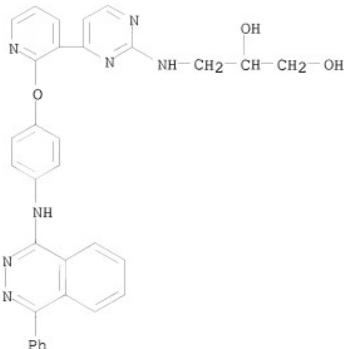


PAGE 2-A



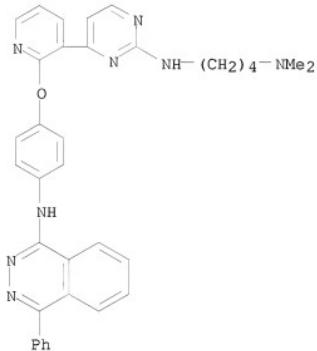
RN 945598-12-9 CAPLUS

CN 1,2-Propanediol, 3-[{4-[2-{4-[(4-phenyl-1-phthalazinyl)amino]phenoxy}-3-pyridinyl]-2-pyrimidinyl]amino]- (CA INDEX NAME)



RN 945598-13-0 CAPLUS

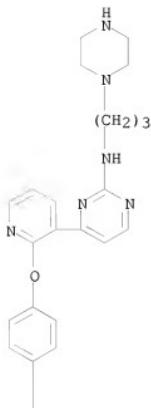
CN 1,4-Butanediamine, N1,N1-dimethyl-N4-[4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl]- (CA INDEX NAME)



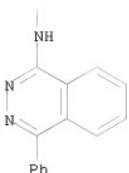
RN 945598-15-2 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[4-[(3-[2-[(3-(1-piperazinyl)propyl)amino]-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]- (CA INDEX NAME)

PAGE 1-A

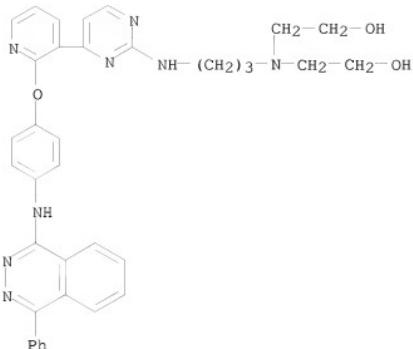


PAGE 2-A



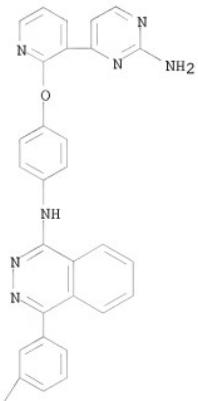
RN 945598-16-3 CAPLUS

CN Ethanol, 2,2'-[{3-[[4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl]amino]propyl}imino]bis- (CA INDEX NAME)



RN 945598-17-4 CAPLUS
 CN Benzenemethanol, 3-[4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A

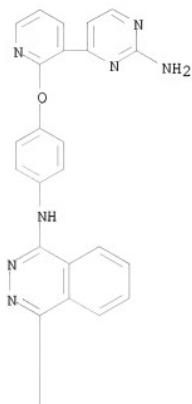


PAGE 2-A



RN 945598-18-5 CAPLUS
CN Phenol, 4-[4-[(4-[[3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]amino]-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A

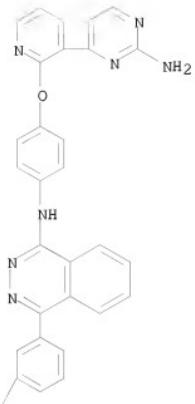


PAGE 2-A

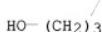


RN 945598-19-6 CAPLUS
CN Benzenepropanol, 3-[4-[(4-[[3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]amino]-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A



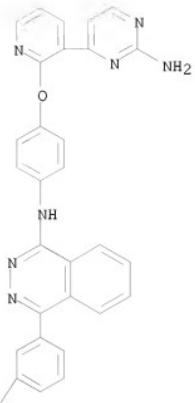
PAGE 2-A



RN 945598-21-0 CAPLUS

CN Benzenemethanol, 3-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]amino]-1-phthalazinyl- α -methyl- (CA INDEX NAME)

PAGE 1-A

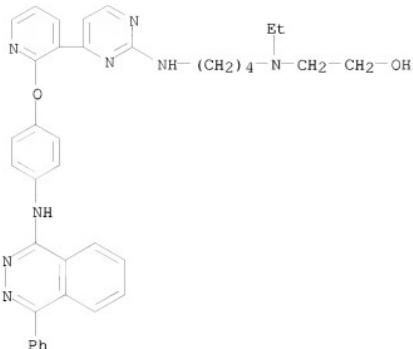


PAGE 2-A



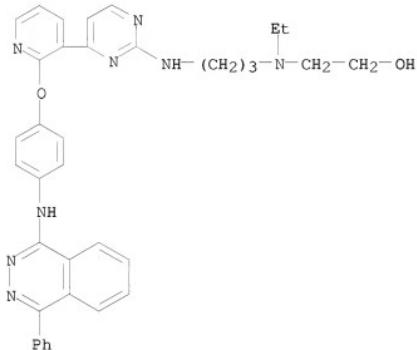
RN 945598-22-1 CAPLUS

CN Ethanol, 2-[ethyl[4-[(4-[(2-[(4-aminophthalazinyl)amino]phenoxy)-3-pyridinyl]-2-pyrimidinyl)amino]butyl]amino]- (CA INDEX NAME)



RN 945598-24-3 CAPLUS

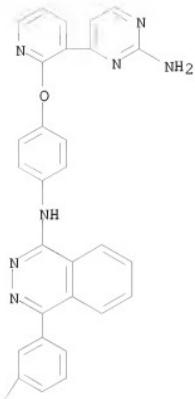
CN Ethanol, 2-[ethyl[3-[(4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl]amino]propylamino- (CA INDEX NAME)



RN 945598-26-5 CAPLUS

CN Benzenemethanol, 3-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl)amino]-1-phthalazinyl-, 1-(dihydrogen phosphate) (CA INDEX NAME)

PAGE 1-A



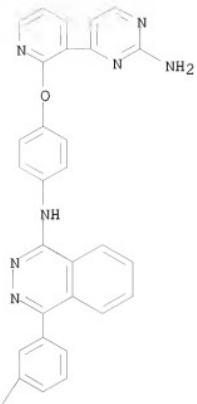
PAGE 2-A



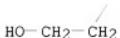
RN 945598-31-2 CAPLUS

CN Benzeneethanol, 3-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]amino]-1-phthalazinyl- (CA INDEX NAME)

PAGE 1-A

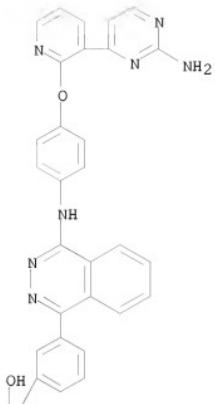


PAGE 2-A



RN 945598-33-4 CAPLUS

CN Benzenemethanol, 3-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]amino]-1-phthalazinyl- α,α -dimethyl- (CA INDEX NAME)

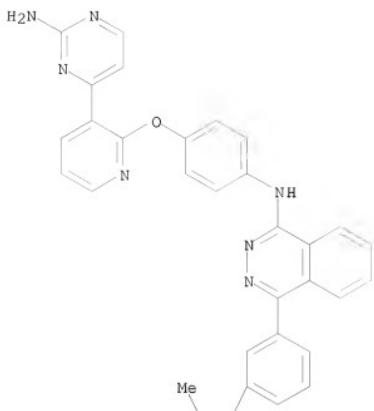


RN 945598-36-7 CAPLUS

CN Benzenemethanol, 3-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]amino]-1-phthalazinyl- α -methyl-, (α S)-(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

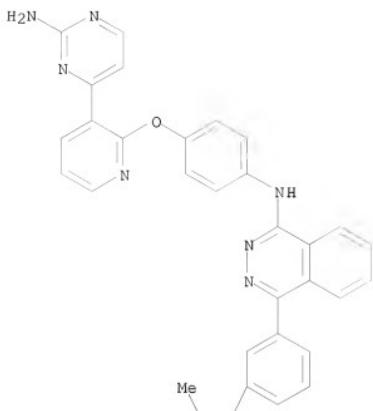


RN 945598-37-8 CAPLUS

CN Benzenemethanol, 3-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]amino]-1-phthalazinyl-, (*αR*)-
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



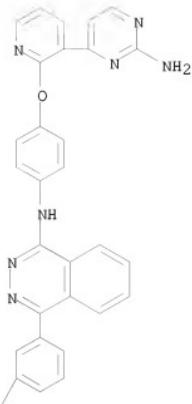
PAGE 2-A



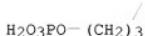
RN 945598-38-9 CAPLUS

CN Benzenepropanol, 3-[4-[(4-[[3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy]phenyl)amino]-1-phthalazinyl]-, 1-(dihydrogen phosphate)
(CA INDEX NAME)

PAGE 1-A

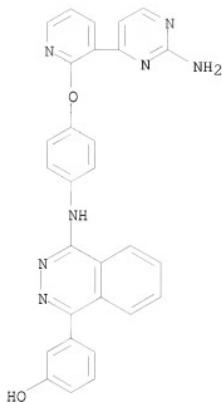


PAGE 2-A

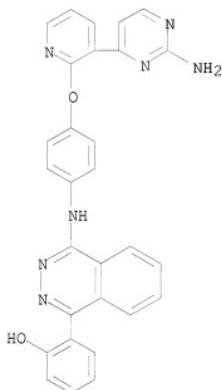


RN 945598-39-0 CAPLUS

CN Phenol, 3-[4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]amino]-1-phthalazinyl]- (CA INDEX NAME)

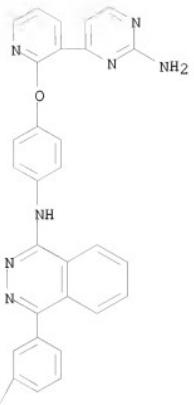


RN 945598-40-3 CAPLUS
CN Phenol, 2-[4-[(4-[[3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]amino]-1-phthalazinyl- (CA INDEX NAME)



RN 945598-42-5 CAPLUS
CN Phenol, 3-[4-[(4-[[3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]amino]-1-phthalazinyl-, 1-(dihydrogen phosphate) (CA INDEX NAME)

PAGE 1-A

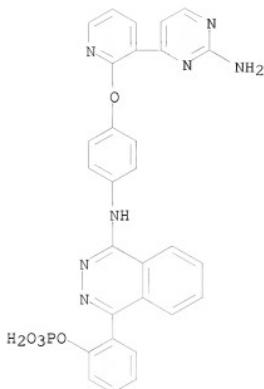


PAGE 2-A



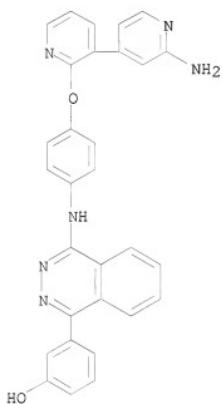
RN 945598-43-6 CAPLUS

CN Phenol, 2-[4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]amino]-1-phthalazinyl]-, 1-(dihydrogen phosphate) (CA INDEX NAME)



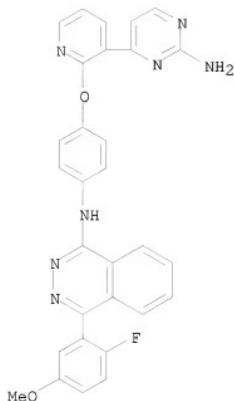
RN 945598-46-9 CAPLUS

CN Phenol, 3-[4-[(4-[(2'-amino[3,4'-bipyridin]-2-yl)oxy]phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

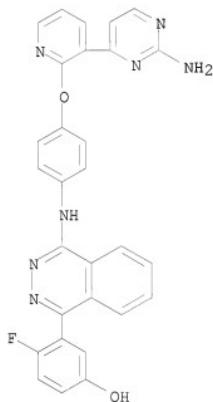


RN 945598-47-0 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(2-fluoro-5-methoxyphenyl)- (CA INDEX NAME)

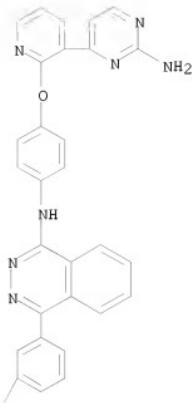


RN 945598-48-1 CAPLUS
CN Phenol, 3-[4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl)amino]-1-phthalazinyl]-4-fluoro- (CA INDEX NAME)



RN 945598-49-2 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-[3-(dimethylamino)propoxylphenyl]- (CA INDEX NAME)

PAGE 1-A



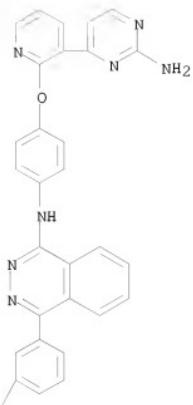
PAGE 2-A

Me₂N—(CH₂)₃—O

RN 945598-52-7 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(3-(trifluoromethoxy)phenyl)- (CA INDEX NAME)

PAGE 1-A

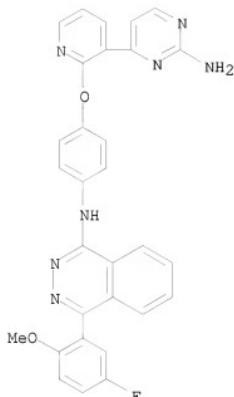


PAGE 2-A



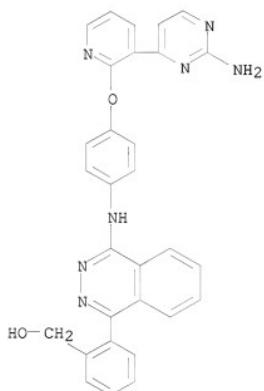
RN 945598-55-0 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(5-fluoro-2-methoxyphenyl)- (CA INDEX NAME)



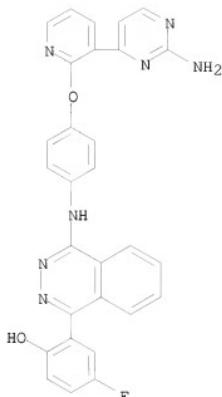
RN 945598-58-3 CAPLUS

CN Benzenemethanol, 2-[4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]amino]-1-phthalazinyl]- (CA INDEX NAME)

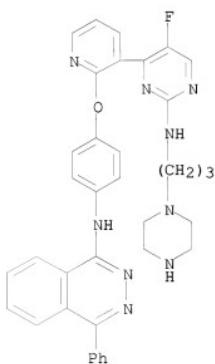


RN 945598-60-7 CAPLUS

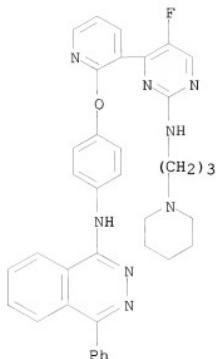
CN Phenol, 2-[4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]amino]-1-phthalazinyl]-4-fluoro- (CA INDEX NAME)



RN 945598-74-3 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-[5-fluoro-2-[(3-(1-piperazinyl)propyl]amino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



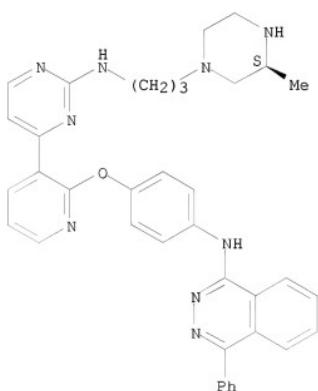
RN 945598-77-6 CAPLUS
CN 1-Phthalazinamine, N-[4-[(3-[5-fluoro-2-[(3-(1-piperidinyl)propyl]amino)-4-pyrimidinyl]-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 945598-85-6 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-[2-[(3-[(3S)-3-methyl-1-(4-((2R,3S)-3-((2S)-2-phenyl-4-pyridinyl)-2-(4-phthalazinyl)oxy)phenyl)-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]-4-phenylpiperazinyl]propyl]amino]- (CA INDEX NAME)

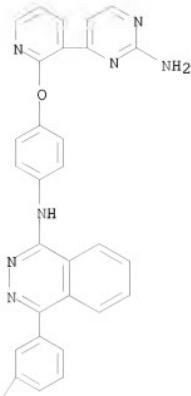
Absolute stereochemistry.



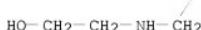
RN 945598-87-8 CAPLUS

CN Ethanol, 2-[(3-[(4-[(4-((2R,3S)-3-((2S)-2-phenyl-4-pyridinyl)-2-(4-phthalazinyl)oxy)phenyl)-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]amino]-1-phthalazinylphenyl)methyl]amino]- (CA INDEX NAME)

PAGE 1-A

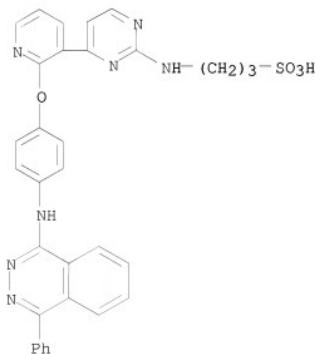


PAGE 2-A

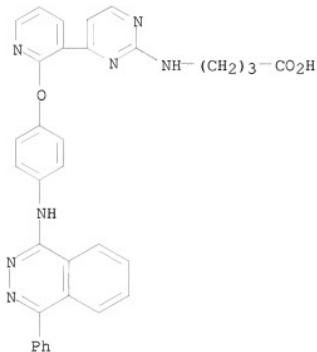


RN 945598-93-6 CAPLUS

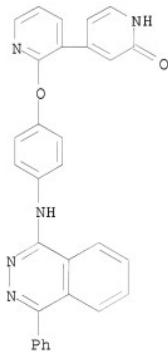
CN 1-Propanesulfonic acid, 3-[(4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl)amino]- (CA INDEX NAME)



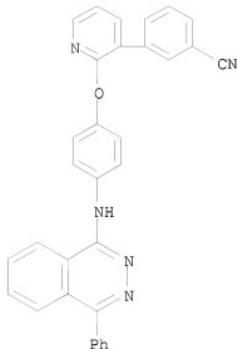
RN 945598-99-2 CAPLUS
CN Butanoic acid, 4-[4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl]amino- (CA INDEX NAME)



RN 945599-03-1 CAPLUS
CN [3,4'-Bipyridin]-2'-(1'H)-one, 2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)

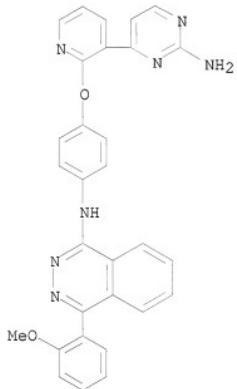


RN 945599-07-5 CAPLUS
CN Benzonitrile, 3-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]- (CA INDEX NAME)



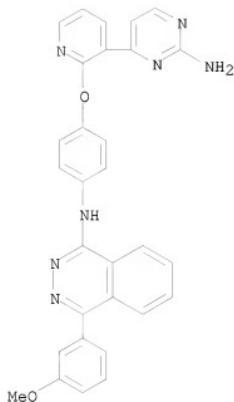
RN 945599-08-6 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(2-methoxyphenyl)- (CA INDEX NAME)

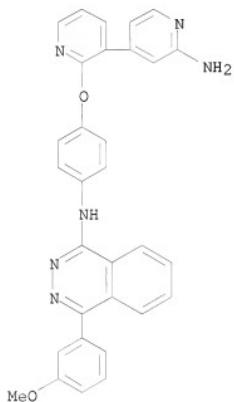


RN 945599-09-7 CAPLUS

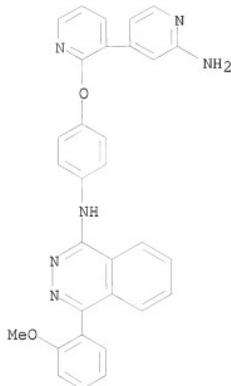
CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(3-methoxyphenyl)- (CA INDEX NAME)



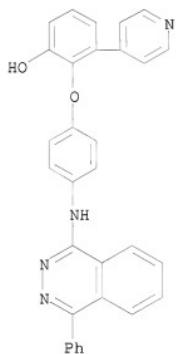
RN 945599-12-2 CAPLUS
CN 1-Phthalazinamine, N-[4-[(2'-amino[3,4'-bipyridin]-2-yl)oxy]phenyl]-4-(3-methoxyphenyl)- (CA INDEX NAME)



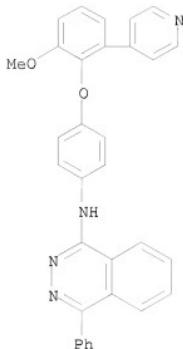
RN 945599-13-3 CAPLUS
CN 1-Phthalazinamine, N-[4-[(2'-amino[3,4'-bipyridin]-2-yl)oxy]phenyl]-4-(2-methoxyphenyl)- (CA INDEX NAME)



RN 945599-18-8 CAPLUS
CN Phenol, 2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-(4-pyridinyl)-
(CA INDEX NAME)

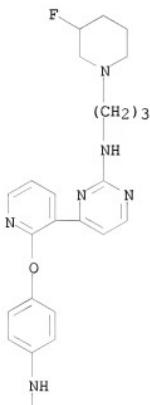


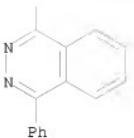
RN 945599-19-9 CAPLUS
CN 1-Phthalazinamine, N-[4-[2-methoxy-6-(4-pyridinyl)phenoxy]phenyl]-4-phenyl-
(CA INDEX NAME)



RN 945599-23-5 CAPLUS
CN 1-Pthalazinamine, N-[4-[(2-[(3-(3-fluoro-1-piperidinyl)propyl]amino)-4-pyrimidinyl]-2-pyridinyl]oxyphenyl]-4-phenyl- (CA INDEX NAME)

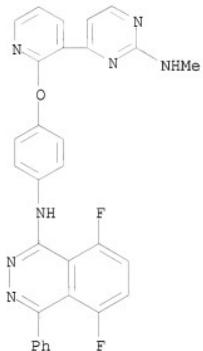
PAGE 1-A





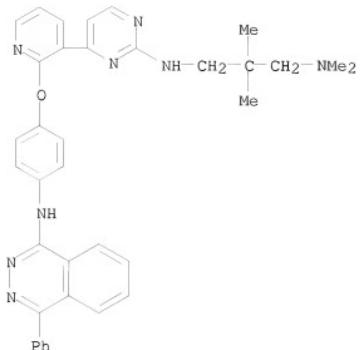
RN 945599-63-3 CAPLUS

CN 1-Phtalazinamine, 5,8-difluoro-N-[4-[(3-(2-(methylamino)-4-pyrimidinyl)-2-pyridinyl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)



RN 945599-71-3 CAPLUS

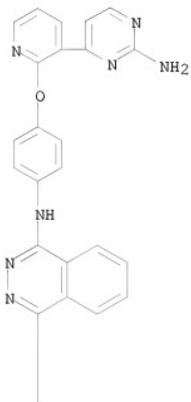
CN 1,3-Propanediamine, N1,N1,2,2-tetramethyl-N3-[4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl- (CA INDEX NAME)

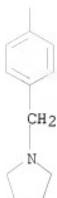


RN 945599-75-7 CAPLUS

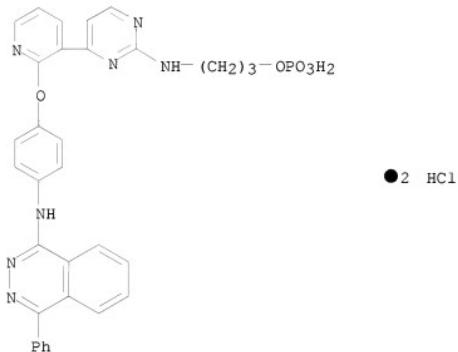
CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]-4-[4-(1-pyrrolidinylmethyl)phenyl]- (CA INDEX NAME)

PAGE 1-A

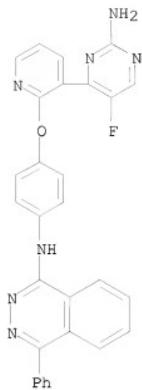




RN 945599-76-8 CAPLUS
 CN 1-Propanol, 3-[(4-[2-[4-((4-phenyl-1-phthalazinyl)amino)phenoxy]-3-pyridinyl)-2-pyrimidinyl]amino]-, 1-(dihydrogen phosphate), hydrochloride (1:2) (CA INDEX NAME)

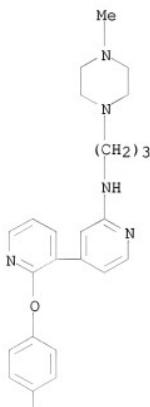


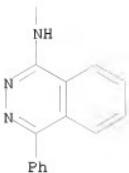
RN 945599-99-5 CAPLUS
 CN N-[4-[(3-(2-amino-5-fluoro-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



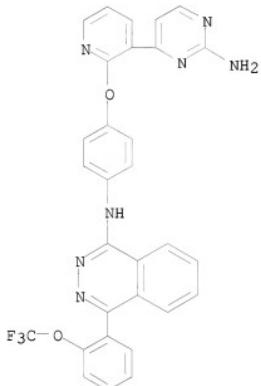
RN 945600-43-1 CAPLUS
CN 1-Phthalazinamine, N-[4-[(2'-(3-(4-methyl-1-piperazinyl)propyl)amino)[3,4'-bipyridin]-2-yl]oxy]phenyl]-4-phenyl- (CA INDEX NAME)

PAGE 1-A



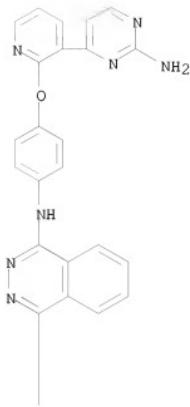


RN 945600-46-4 CAPLUS
 CN 1-Phthalazinamine, N-[4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-(2-(trifluoromethoxy)phenyl)- (CA INDEX NAME)



IT 945600-16-8 945600-17-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of substituted phthalazinamines as Aurora kinase modulators)
 RN 945600-16-8 CAPLUS
 CN Benzaldehyde, 4-[(4-[(3-(2-amino-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl)amino]-1-phthalazinyl- (CA INDEX NAME)

PAGE 1-A

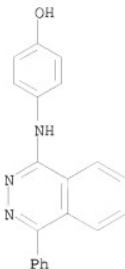


PAGE 2-A



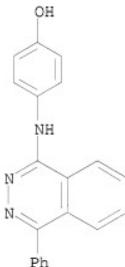
RN 945600-17-9 CAPLUS

CN Phenol, 4-[(4-phenyl-1-phthalazinyl)amino]-, hydrochloride (1:1) (CA INDEX NAME)

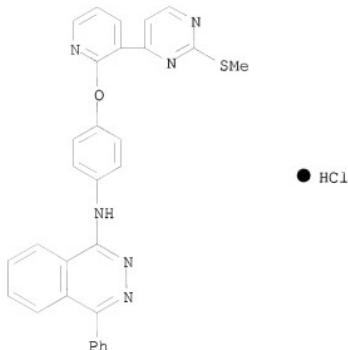


● HCl

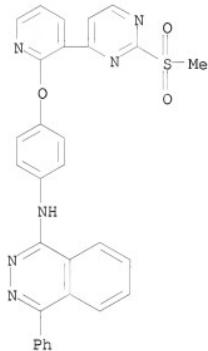
IT 333776-18-4P 945599-73-5P 945599-74-6P
945599-77-9P 945599-79-1P 945599-80-4P
945599-81-5P 945599-97-3P 945599-98-4P
945600-03-3P 945600-10-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of substituted phthalazinamines as Aurora kinase modulators)
RN 333776-18-4 CAPLUS
CN Phenol, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)



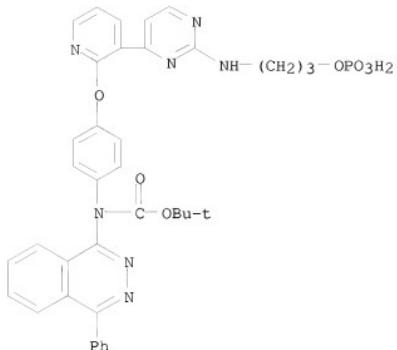
RN 945599-73-5 CAPLUS
CN 1-Phtalazinamine, N-[4-[(3-[(2-(methylthio)-4-pyrimidinyl)-2-pyridinyl]oxy)phenyl]-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)



RN 945599-74-6 CAPLUS
 CN 1-Phthalazinamine, N-[4-[(3-[(2-(methylsulfonyl)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)

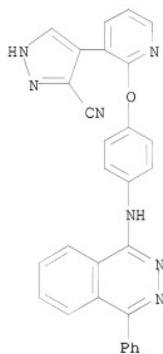


RN 945599-77-9 CAPLUS
 CN Carbamic acid, N-(4-phenyl-1-phthalazinyl)-N-[4-[(3-[(2-[(3-phosphonoxy)propyl]amino)-4-pyrimidinyl]-2-pyridinyl)oxy]phenyl]-, C-(1,1-dimethylethyl) ester (CA INDEX NAME)



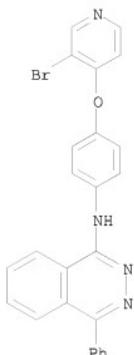
RN 945599-79-1 CAPLUS

CN 1H-Pyrazole-3-carbonitrile, 4-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]- (CA INDEX NAME)



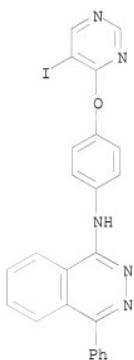
RN 945599-80-4 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-bromo-4-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



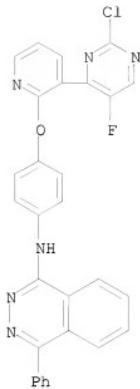
RN 945599-81-5 CAPLUS

CN 1-Phthalazinamine, N-[4-[(5-iodo-4-pyrimidinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



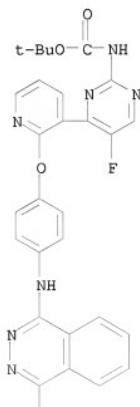
RN 945599-97-3 CAPLUS

CN 1-Phthalazinamine, N-[4-[(3-(2-chloro-5-fluoro-4-pyrimidinyl)-2-pyridinyl)oxy]phenyl]-4-phenyl- (CA INDEX NAME)



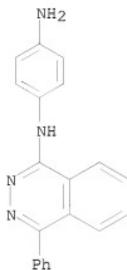
RN 945599-98-4 CAPLUS
CN Carbamic acid, N-[5-fluoro-4-[2-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]-2-pyrimidinyl-,
1,1-dimethylethyl ester (CA INDEX NAME)

PAGE 1-A

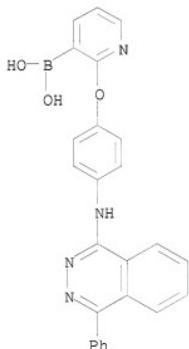




RN 945600-03-3 CAPLUS
 CN 1,4-Benzenediamine, N1-(4-phenyl-1-phthalazinyl)- (CA INDEX NAME)



RN 945600-10-2 CAPLUS
 CN Boronic acid, B-[2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]-3-pyridinyl]- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:748003 CAPLUS
 DOCUMENT NUMBER: 147:439882
 TITLE: Phosphodiesterase Type 5 Is Highly Expressed in the Hypertrophied Human Right Ventricle, and Acute

Inhibition of Phosphodiesterase Type 5 Improves Contractility

AUTHOR(S): Nagendran, Jayan; Archer, Stephen L.; Soliman, Daniel; Gurtu, Vikram; Moudgil, Rohit; Haromy, Alois; St. Aubin, Chantal; Webster, Linda; Rebeyka, Ivan M.; Ross, David B.; Light, Peter E.; Dyck, Jason R. B.; Michelakis, Evangelos D.

CORPORATE SOURCE: Pulmonary Hypertension Program, University of Alberta, Edmonton, AB, Can.

SOURCE: Circulation (2007), 116(3), 238-248

CODEN: CIRCAZ; ISSN: 0009-7322

PUBLISHER: Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

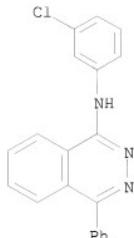
AB Background: Sildenafil was recently approved for the treatment of pulmonary arterial hypertension. The beneficial effects of phosphodiesterase type 5 (PDE5) inhibitors in pulmonary arterial hypertension are thought to result from relatively selective vasodilatory and antiproliferative effects on the pulmonary vasculature and, on the basis of early data showing lack of significant PDE5 expression in the normal heart, are thought to spare the myocardium. Methods and Results: We studied surgical specimens from 9 patients and show here for the first time that although PDE5 is not expressed in the myocardium of the normal human right ventricle (RV), mRNA and protein are markedly upregulated in hypertrophied RV (RVH) myocardium. PDE5 also is upregulated in rat RVH. PDE5 inhibition (with either MY-5445 or sildenafil) significantly increases contractility, measured in the perfused heart (modified Langendorff preparation) and isolated cardiomyocytes, in RVH but not normal RV. PDE5 inhibition leads to increases in both cGMP and cAMP in RVH but not normal RV. Protein kinase G activity is suppressed in RVH, explaining why the PDE5 inhibitor-induced increase in cGMP does not lead to inhibition of contractility. Rather, it leads to inhibition of the cGMP-sensitive PDE3, explaining the increase in cAMP and contractility. This is further supported by our findings that, in RVH protein kinase A, inhibition completely inhibits PDE5-induced inotropy, whereas protein kinase G inhibition does not. Conclusions: The ability of PDE5 inhibitors to increase RV inotropy and to decrease RV afterload without significantly affecting systemic hemodynamics makes them ideal for the treatment of diseases affecting the RV, including pulmonary arterial hypertension.

IT 78351-75-4, MY-5445

RL: PAC (Pharmacological activity); BIOL (Biological study)
(phosphodiesterase type 5 was highly expressed in hypertrophied human right ventricle, and acute inhibition of phosphodiesterase type 5 with sildenafil increased contractility in cardiomyocytes of rat with hypertrophied right ventricle)

RN 78351-75-4 CAPLUS

CN 1-Phtalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:670242 CAPLUS
 DOCUMENT NUMBER: 147:87694
 TITLE: Method using a NMDA receptor antagonist and a μ -opiate receptor agonist, partial agonist, or agonist/antagonist for the treatment of premature ejaculation in humans
 INVENTOR(S): Singh, Chandra
 PATENT ASSIGNEE(S): Azaya Therapeutics, Inc., USA
 SOURCE: PCT Int. Appl., 62pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

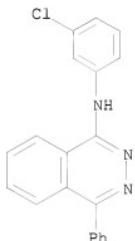
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2007070779 | A2 | 20070621 | WO 2006-US61873 | 20061211 |
| WO 2007070779 | A3 | 20071213 | | |
| W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MM, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| EP 1969117 | A2 | 20080917 | EP 2006-846555 | 20061211 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| PRIORITY APPLN. INFO.: | | | US 2005-749813P | P 20051213 |
| | | | WO 2006-US61873 | W 20061211 |

AB The invention belongs to the fields of pharmacol., medicine and medicinal chemical, and provides methods and compns. for treating sexual dysfunction; more particularly, the invention relates to treatment of premature ejaculation in humans. The methodol. of the invention uses a NMDA receptor antagonist and a μ -opiate receptor agonist, partial agonist,

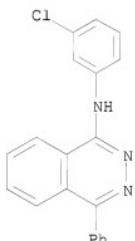
or or agonist/antagonist. The method may also include other agents, e.g. phosphodiesterase V inhibitors.

IT 78351-75-4, MY5445 78351-75-4D, MY5445, salts
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(NMDA receptor antagonist and μ opiate receptor agonist, partial
agonist, or agonist/antagonist for treatment of premature ejaculation)

RN 78351-75-4 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



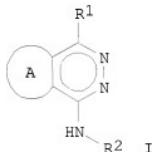
RN 78351-75-4 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 16 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:644166 CAPLUS
DOCUMENT NUMBER: 147:64566
TITLE: Novel activator of nuclear orphan receptor and use
thereof
INVENTOR(S): Shimizu, Toshiyuki; Niwa, Takuro; Chiba, Kan;
Hosokawa, Masakiyo; Kobayashi, Kaoru
PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan; National
University Corporation Chiba University
SOURCE: PCT Int. Appl., 24pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------------------|----------|------------------|------------|
| WO 2007066615 | A1 | 20070614 | WO 2006-JP324171 | 20061204 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| PRIORITY APPLN. INFO.: | | | JP 2005-350440 | A 20051205 |
| OTHER SOURCE(S): | MARPAT 147:64566 | | | |
| GI | | | | |



AB Disclosed is a compound represented by the general formula (I) or a pharmaceutically acceptable salt thereof or a solvate of the compound or the salt, which can be used as a pregnane receptor activator. (I) wherein R1 represents a cyclohexyl group, a Ph group which may have at least one substituent selected from a C1-C4 alkyl group, a C1-C4 alkoxy group and a halogen atom, a thiienyl group which may have at least one substituent selected from a C1-C4 alkyl group, a C1-C4 alkoxy group and a halogen atom, a furyl group which may have at least one substituent selected from a C1-C4 alkyl group, a C1-C4 alkoxy group and a halogen atom, a phenoxy group, a C1-C4 phenylalkyl group, a phenylthio group, a morpholino group, a piperidyl group, a pyrrolidinyl group, a pyridyl group, or an imidazolyl group; R2 represents -CHR3R4 (where R3 represents a hydrogen atom or a C1-C4 alkyl group; and R4 represents a C1-C4 alkyl group, a cyclohexyl group, a thiienyl group or a Ph group which may have at least one substituent selected from a C1-C4 alkyl group, a C1-C4 alkoxy group and a halogen atom) or a cyclohexyl group; and the ring A represents a benzene ring, a thiophene ring or a furan ring.

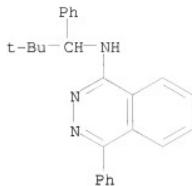
IT 137998-75-5 138126-46-2 149549-69-9
940953-91-3 940953-94-6 940953-95-7
940954-00-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel activator of nuclear orphan receptor for treatment of liver, kidney, and metabolic diseases)

RN 137998-75-5 CAPLUS

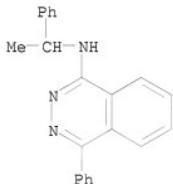
CN 1-Phtalazinamine, N-(2,2-dimethyl-1-phenylpropyl)-4-phenyl- (CA INDEX

NAME)



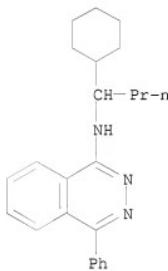
RN 138126-46-2 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-(1-phenylethyl)- (CA INDEX NAME)



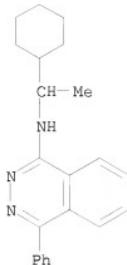
RN 149549-69-9 CAPLUS

CN 1-Phthalazinamine, N-(1-cyclohexylbutyl)-4-phenyl- (CA INDEX NAME)

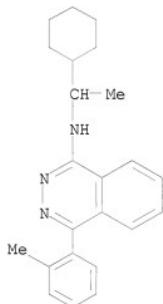


RN 940953-91-3 CAPLUS

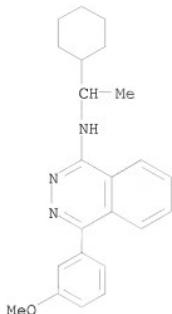
CN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-phenyl- (CA INDEX NAME)



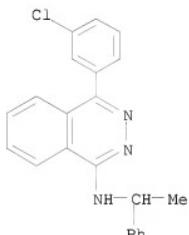
RN 940953-94-6 CAPLUS
CN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-(2-methylphenyl)- (CA INDEX NAME)



RN 940953-95-7 CAPLUS
CN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-(3-methoxyphenyl)- (CA INDEX NAME)



RN 940954-00-7 CAPLUS
 CN 1-Phthalazinamine, 4-(3-chlorophenyl)-N-(1-phenylethyl)- (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007230735 CAPLUS
 DOCUMENT NUMBER: 1461295952
 TITLE: Preparation of bis-aryl urea compounds for the treatment of protein kinase-mediated diseases
 Geuns-Meyer, Stephanie D.; Chaffee, Stuart C.; Johnson, Rebecca E.; Kim, Joseph L.; Nunes, Joseph J.; Patel, Vinod F.
 INVENTOR(S):
 PATENT ASSIGNEE(S): Amgen Inc., USA
 SOURCE: PCT Int. Appl., 143pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2007024754 | A1 | 20070301 | WO 2006-US32509 | 20060818 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
 KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,
 MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,
 RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

АП 2006283426 А1 20070301 АП 2006-283426 20060818

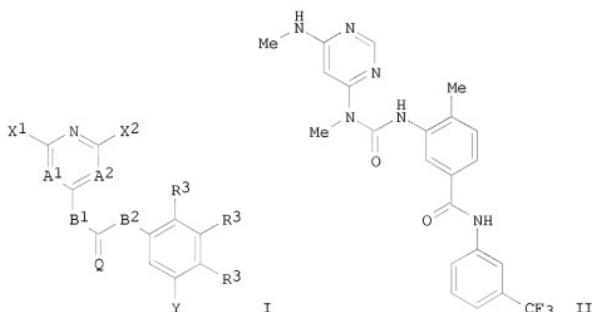
AS 2006-2619366 A1 20070301 CA 2006-2619366 20060818

US 20070049592 A1 20070301 US 2006-5066693 20060818

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
BA, HR, MK, RS

PRIORITY APPLN. INFO.: US 2005-710449P P 20050822
WO 2006-US32509 W 20060818

OTHER SOURCE(S): CASREACT 146:295952; MARPAT 146:295952
GI



AB The title compds. I [A1 = CH or N; A2 = CH or N; B1 = NR₂, O or S; B2 = NR₂, O or S; Q = O, S, NH or N(CN); one of XI and X2 = H, halo, NO₂, etc. and the other is H atom; Y = C(O)R₅, SO₂R₅, NR₄R₅, etc.; R₃ = H, alkyl, alkenyl, etc.; R₄ = H, alkyl, alkenyl, etc.; R₅ = partially or fully (un)saturated 3-8 membered monocyclic, 6-12 membered bicyclic or 7-14 membered tricyclic ring system] which are capable of modulating various protein kinase receptors such as Tie-2 and, therefore, influencing kinase related disease states and conditions, were prepared. General procedures for preparing compds. I were given. Over fifty compds. I were prepared and tested in various biol. tests. For example, compound II showed IC₅₀ of ≤ 5 μM when tested against Tie-2 kinase. Compds. I, for example, are capable of treating cancer caused by unregulated angiogenesis, and inflammation as well as other proliferative disorders. Pharmaceutical composition comprising the compound I is also disclosed.

IT 928123-66-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

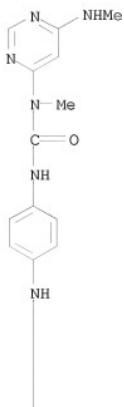
(Uses)

(preparation of bis-aryl urea compds. useful in treatment of protein kinase-mediated diseases)

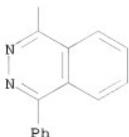
RN 928123-66-4 CAPLUS

CN Urea, N-methyl-N-[6-(methylamino)-4-pyrimidinyl]-N'-[4-[(4-phenyl-1-phthalazinyl)amino]phenyl]- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 18 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:222944 CAPLUS

DOCUMENT NUMBER: 147:397775

TITLE: A cell-based, high-throughput screen for small molecule regulators of hepatitis C virus replication

AUTHOR(S): Kim, Sun Suk; Peng, Lee F.; Lin, Wenyu; Choe, Won-Hyeok; Sakamoto, Naoya; Schreiber, Stuart L.; Chung, Raymond T.

CORPORATE SOURCE: GI Unit, Department of Medicine, Massachusetts General Hospital, Boston, MA, USA

SOURCE: Gastroenterology (2007), 132(1), 311-320

CODEN: GASTAB; ISSN: 0016-5085
PUBLISHER: Elsevier Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

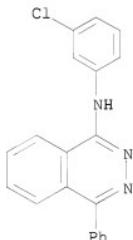
AB Background & Aims: Only half of patients with chronic hepatitis C virus (HCV) infection experience sustained viro. response to pegylated-interferon and ribavirin, which cause numerous side effects. Thus, the identification of more effective and better tolerated agents is a high priority. We applied chemical biol. to screen small mols. that regulate HCV. Methods: We first optimized the HuH7/Rep-Feo replicon cell line for the 384-well microplate format and used this line to screen a large library of well-characterized, known biol. active compds. using automated technol. After identifying several mols. capable of either stimulating or inhibiting HCV replication in this primary screen, we then validated our hit compds. using a full-length HCV replicon cell line in secondary screens. Results: We identified and validated a number of antiviral and proviral agents, including HMG-CoA reductase inhibitors (antiviral) and corticosteroids (proviral). The finding of increased replication associated with corticosteroids suggests that these agents directly promote viral replication independent of their suppressive effects on the immune response. The finding of antiviral activity associated with the HMG-CoA reductase inhibitors implies an important role for lipid metabolism in the viral life cycle. Conclusions: We have developed a simple, reproducible, and reliable cell-based high-throughput screening assay system using an HCV replicon model to identify small mols. that regulate HCV replication. This method can be used to identify not only putative antiviral agents, but also cellular regulators of viral replication.

IT 78351-75-4, MY-5445

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MY-5445 inhibited replication of hepatitis C virus in cell based-high-throughput screening assay system)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 19 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:175954 CAPLUS

DOCUMENT NUMBER: 146:371902

TITLE: Urearetics: a small molecule screen yields nanomolar potency inhibitors of urea transporter UT-B

AUTHOR(S): Levin, Marc H.; de la Fuente, Ricardo; Verkman, A. S.
CORPORATE SOURCE: Departments of Medicine and Physiology, Cardiovascular

SOURCE: Research Institute, Graduate Group in Biophysics,
University of California, San Francisco, CA, USA
FASEB Journal (2007), 21(2), 551-563
CODEN: FAJOEC; ISSN: 0892-6638

PUBLISHER: Federation of American Societies for Experimental
Biology

DOCUMENT TYPE: Journal

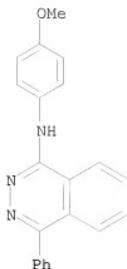
LANGUAGE: English

AB Functional studies in knockout mice indicate a critical role for urea transporters (UTs) in the urinary concentrating mechanism and in renal urea clearance. However, potent and specific urea transport blockers have not been available. Here, we used high-throughput screening to discover high-affinity, small mol. inhibitors of the UT-B urea transporter. A collection of 50,000 diverse, drug-like compds. was screened using a human erythrocyte lysis assay based on UT-B-facilitated acetamide transport. Primary screening yielded .apprx.30 UT-B inhibitors belonging to the phenylsulfonyoxazole, benzenesulfonanilide, phthalazinamine, and aminobenzimidazole chemical classes. Screening of .apprx.700 structurally similar analogs gave many active compds., the most potent of which inhibited UT-B urea transport with an EC50 of .apprx.10 nM, and .apprx.100% inhibition at higher concns. Phenylsulfonyoxazoles and phthalazinamines also blocked rodent UT-B and had good UT-B vs. UT-A specificity. The UT-B inhibitors did not reduce aquaporin-1 (AQP1)-facilitated water transport. In AQP1-null erythrocytes, "chemical UT-B knockout" by UT-B inhibitors reduced by .apprx.3-fold UT-B-mediated water transport, supporting an aqueous pore pathway through UT-B. UT-B inhibitors represent a new class of diuretics, "urearetics," which are predicted to increase renal water and solute clearance in water-retaining states.

IT 78351-69-6 330829-79-3 330830-30-3
335206-93-4 364597-81-9 364625-28-5
364626-60-8 374911-91-8 374914-31-5
374920-49-7 374922-26-6 375352-54-8
375353-73-4 375355-44-5 375358-45-5
375360-16-0 375828-13-0 375830-70-9
375832-06-7 375833-78-6 375835-00-0
375840-32-7 375841-50-2 376374-54-8
397278-96-5 488724-46-5 496773-16-1
510759-89-4 931104-77-7 931104-78-8
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(urearetics: small mol. screen yields nanomolar potency inhibitors of urea transporter UT-B)

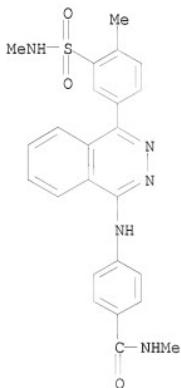
RN 78351-69-6 CAPLUS

CN 1-Phthalazinamine, N-(4-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



RN 330829-79-3 CAPLUS

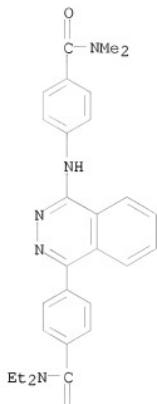
CN Benzanide, N-methyl-4-[(4-methyl-3-[(methylamino)sulfonyl]phenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)



RN 330830-30-3 CAPLUS

CN Benzanide, 4-[(4-[(diethylamino)carbonyl]phenyl)-1-phthalazinyl]amino-N,N-dimethyl- (CA INDEX NAME)

PAGE 1-A

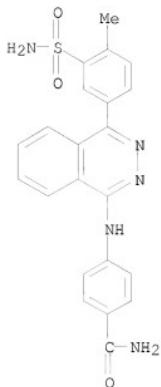


PAGE 2-A

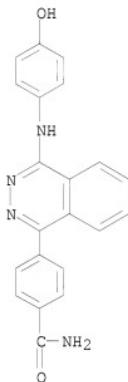


RN 335206-93-4 CAPLUS

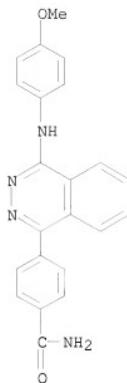
CN Benzamide, 4-[(4-[3-(aminosulfonyl)-4-methylphenyl]-1-phthalazinyl]amino]-
(CA INDEX NAME)



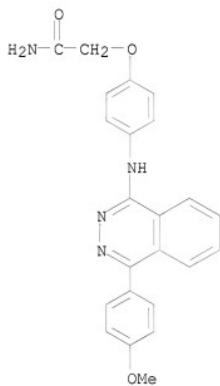
RN 364597-81-9 CAPLUS
CN Benzamide, 4-[4-[(4-hydroxyphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



RN 364625-28-5 CAPLUS
CN Benzamide, 4-[4-[(4-methoxyphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

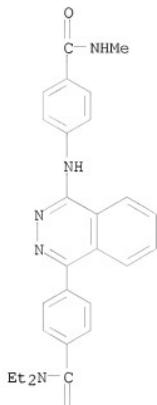


RN 364626-60-8 CAPLUS
CN Acetamide, 2-[4-[(4-methoxyphenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)



RN 374911-91-8 CAPLUS
CN Benzamide, N,N-diethyl-4-[(4-[(methylamino)carbonyl]phenyl)amino]-1-phthalazinyl- (CA INDEX NAME)

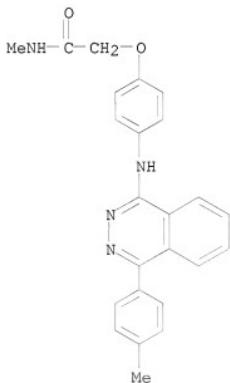
PAGE 1-A



PAGE 2-A

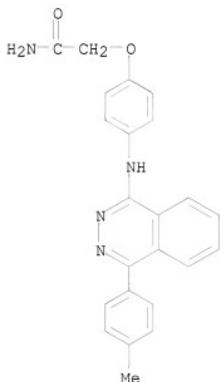


RN 374914-31-5 CAPLUS
CN Acetamide, N-methyl-2-[4-[4-(4-methylphenyl)-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)



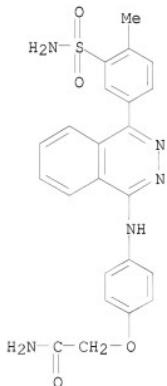
RN 374920-49-7 CAPLUS

CN Acetamide, 2-[4-[(4-methylphenyl)-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)



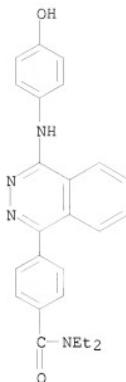
RN 374922-26-6 CAPLUS

CN Acetamide, 2-[4-[(4-(aminosulfonyl)-4-methylphenyl)-1-phthalazinyl]amino]phenoxy]- (CA INDEX NAME)

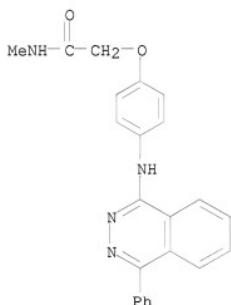


RN 375352-54-8 CAPLUS

CN Benzanide, N,N-diethyl-4-[(4-hydroxyphenyl)amino]-1-phthalazinyl- (CA INDEX NAME)

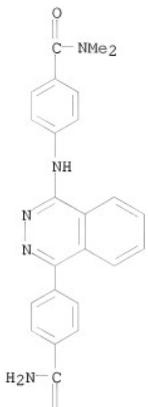


RN 375353-73-4 CAPLUS
CN Acetamide, N-methyl-2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)



RN 375355-44-5 CAPLUS
CN Benzamide, 4-[(4-[(4-aminocarbonyl)phenyl]-1-phthalazinyl)amino]-N,N-dimethyl- (CA INDEX NAME)

PAGE 1-A

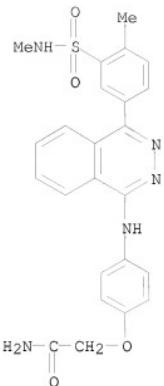


PAGE 2-A

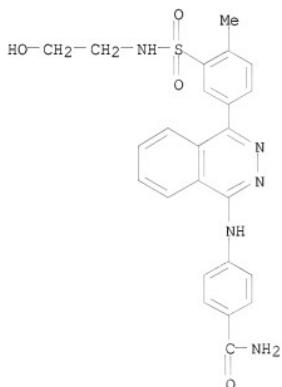


RN 375358-45-5 CAPLUS

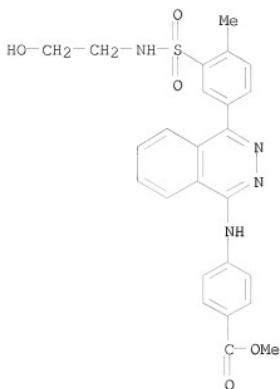
CN Acetamide, 2-[4-[(4-methyl-3-[(methylamino)sulfonyl]phenyl]-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)



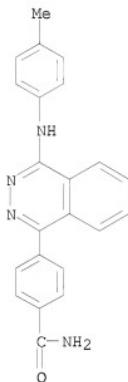
RN 375360-16-0 CAPLUS
 CN Benzamide, 4-[[4-[3-[(2-hydroxyethyl)amino]sulfonyl]-4-methylphenyl]-1-phthalazinyl]amino]- (CA INDEX NAME)



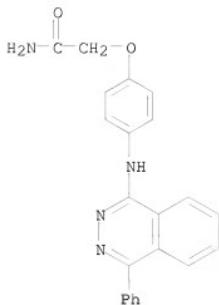
RN 375828-13-0 CAPLUS
 CN Benzoic acid, 4-[[4-[3-[(2-hydroxyethyl)amino]sulfonyl]-4-methylphenyl]-1-phthalazinyl]amino]-, methyl ester (CA INDEX NAME)



RN 375830-70-9 CAPLUS
CN Benzamide, 4-[4-[(4-methylphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

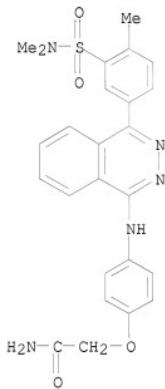


RN 375832-06-7 CAPLUS
CN Acetamide, 2-[4-[(4-phenyl-1-phthalazinyl)amino]phenoxy]- (CA INDEX NAME)



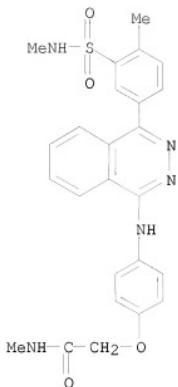
RN 375833-78-6 CAPLUS

CN Acetamide, 2-[4-[(4-[(dimethylamino)sulfonyl]-4-methylphenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)



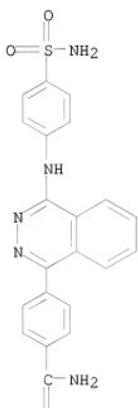
RN 375835-00-0 CAPLUS

CN Acetamide, N-methyl-2-[4-[(4-methyl-3-[(methylamino)sulfonyl]phenyl)-1-phthalazinyl]amino]phenoxy- (CA INDEX NAME)



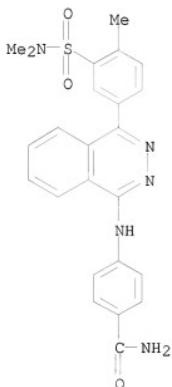
RN 375840-32-7 CAPLUS
CN Benzamide, 4-[4-[(4-(aminosulfonyl)phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A

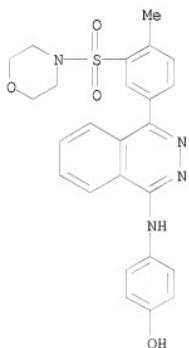




RN 375841-50-2 CAPLUS
CN Benzamide, 4-[(4-[3-((dimethylamino)sulfonyl)-4-methylphenyl]-1-phthalazinyl)amino]- (CA INDEX NAME)



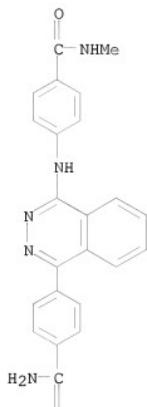
RN 376374-54-8 CAPLUS
CN Phenol, 4-[(4-methyl-3-(4-morpholinylsulfonyl)phenyl]-1-phthalazinyl)amino]- (CA INDEX NAME)



RN 397278-96-5 CAPLUS

CN Benzamide, 4-[4-(aminocarbonyl)phenyl]-1-phthalazinylamino]-N-methyl-
(CA INDEX NAME)

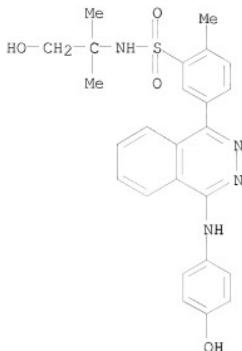
PAGE 1-A



PAGE 2-A

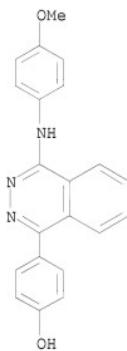


RN 488724-46-5 CAPLUS
CN Benzenesulfonamide, N-(2-hydroxy-1,1-dimethylethyl)-5-[4-((4-
hydroxyphenyl)amino)-1-phthalazinyl]-2-methyl- (CA INDEX NAME)



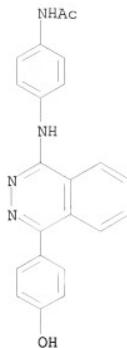
RN 496773-16-1 CAPLUS

CN Phenol, 4-[4-[(4-methoxyphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



RN 510759-89-4 CAPLUS

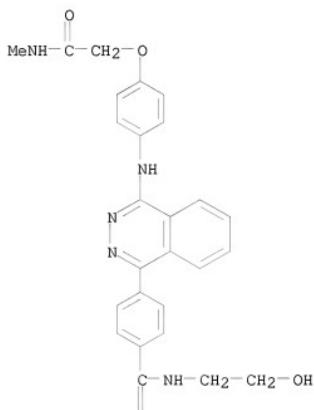
CN Acetamide, N-[4-[(4-hydroxyphenyl)-1-phthalazinyl]amino]phenyl- (CA INDEX NAME)



RN 931104-77-7 CAPLUS

CN Benzanide, N-(2-hydroxyethyl)-4-[(4-[(2-(methylamino)-2-oxoethoxy)phenyl]amino)-1-phthalazinyl]- (CA INDEX NAME)

PAGE 1-A

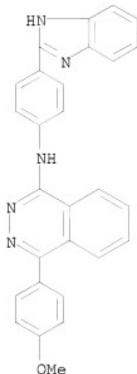


PAGE 2-A



RN 931104-78-8 CAPLUS

CN 1-Phthalazinamine, N-[4-(1H-benzimidazol-2-yl)phenyl]-4-(4-methoxyphenyl)-
(CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:92389 CAPLUS
DOCUMENT NUMBER: 146:329888
TITLE: 4-(Azolylphenyl)-phthalazin-1-amines: novel inhibitors of VEGF receptors I and II
AUTHOR(S): Kiselyov, Alexander S.; Semenov, Victor V.; Milligan, Daniel
CORPORATE SOURCE: Chemical Diversity Inc., San Diego, CA, 92121, USA
SOURCE: Chemical Biology & Drug Design (2006), 68(6), 308-313
CODEN: CBDAL; ISSN: 1747-0277
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:329888

AB Novel potent derivs. of phthalazine are described as ATP-competitive inhibitors of vascular endothelial growth factor receptors I and II (VEGFR-1/2). A number of compds. display VEGFR-2 inhibitory activity reaching that of Vatalanib 3 (IC50 < 100 nM) in an HTRF enzymic assay. Several derivs. also show good potential for the development as VEGFR-2 specific inhibitors showing 15-20-fold selectivity over VEGFR-1.

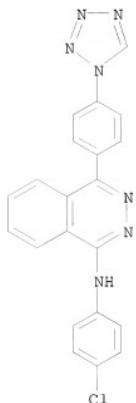
IT 929200-84-0P 929200-85-1P 929200-86-2P
929200-88-4P 929200-89-5P 929200-90-8P
929200-91-9P 929200-92-0P 929200-93-1P
929200-94-2P 929200-95-3P 929200-96-4P
929200-97-5P 929200-98-6P 929201-00-3P
929201-01-4P 929201-02-5P 929201-03-6P
929201-04-7P 929201-05-8P 929201-06-9P
929201-07-0P 929201-08-1P 929201-09-2P
1026043-85-5P 1026674-06-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(4-(Azolylphenyl)-phthalazin-1-amines: novel inhibitors of VEGF receptors I and II)

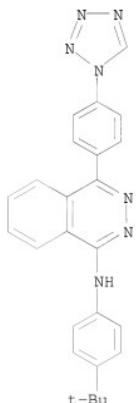
RN 929200-84-0 CAPLUS

CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



RN 929200-85-1 CAPLUS

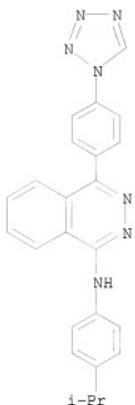
CN 1-Phthalazinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



RN 929200-86-2 CAPLUS

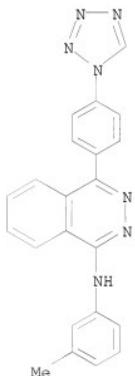
CN 1-Phthalazinamine, N-[4-(1-methylethyl)phenyl]-4-[4-(1H-tetrazol-1-

yl)phenyl]- (CA INDEX NAME)



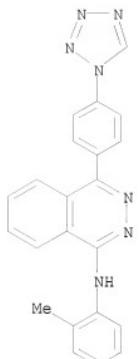
RN 929200-88-4 CAPLUS

CN 1-Phthalazinamine, N-(3-methylphenyl)-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



RN 929200-89-5 CAPLUS

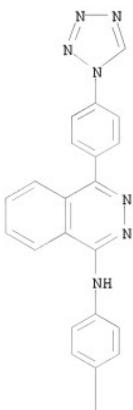
CN 1-Phthalazinamine, N-(2-methylphenyl)-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



RN 929200-90-8 CAPLUS

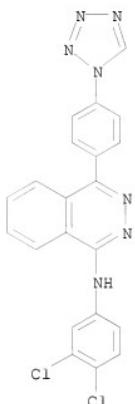
CN 1-Phthalazinamine, N-[4-(4-morpholinyl)phenyl]-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)

PAGE 1-A

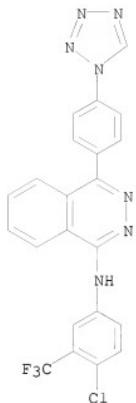




RN 929200-91-9 CAPLUS
CN 1-Phthalazinamine, N-(3,4-dichlorophenyl)-4-[4-(1H-tetrazol-1-yl)phenyl]-
(CA INDEX NAME)

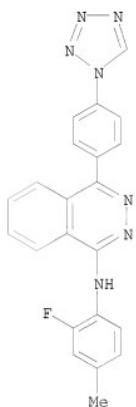


RN 929200-92-0 CAPLUS
CN 1-Phthalazinamine, N-[4-chloro-3-(trifluoromethyl)phenyl]-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



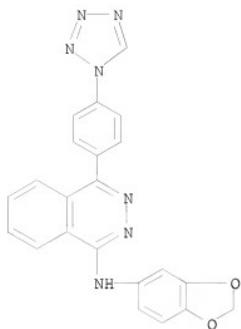
RN 929200-93-1 CAPLUS

CN 1-PhtHALAZINamine, N-(2-fluoro-4-methylphenyl)-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



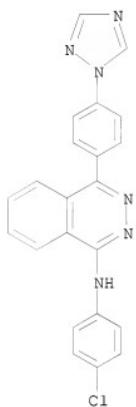
RN 929200-94-2 CAPLUS

CN 1-PhtHALAZINamine, N-1,3-benzodioxol-5-yl-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



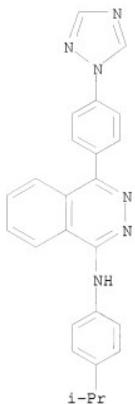
RN 929200-95-3 CAPLUS

CN 1-Phtalazinamine, N-(4-chlorophenyl)-4-[4-(1H-1,2,4-triazol-1-yl)phenyl]-
(CA INDEX NAME)



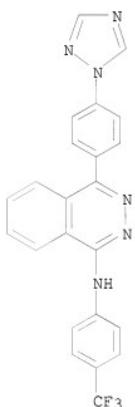
RN 929200-96-4 CAPLUS

CN 1-Phtalazinamine, N-[4-(1-methylethyl)phenyl]-4-[4-(1H-1,2,4-triazol-1-
yl)phenyl]- (CA INDEX NAME)



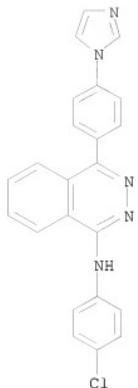
RN 929200-97-5 CAPLUS

CN 1-Phthalazinamine, 4-[4-(1H-1,2,4-triazol-1-yl)phenyl]-N-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

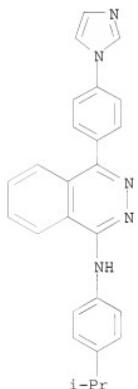


RN 929200-98-6 CAPLUS

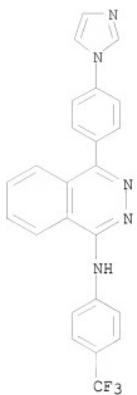
CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-[4-(1H-imidazol-1-yl)phenyl]- (CA INDEX NAME)



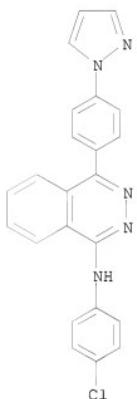
RN 929201-00-3 CAPLUS
CN 1-Phtalazinamine, 4-[4-(1H-imidazol-1-yl)phenyl]-N-[4-(1-methylethyl)phenyl]- (CA INDEX NAME)



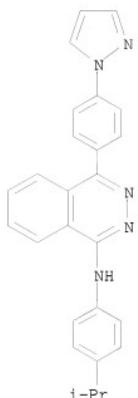
RN 929201-01-4 CAPLUS
CN 1-Phtalazinamine, 4-[4-(1H-imidazol-1-yl)phenyl]-N-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



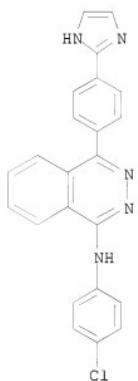
RN 929201-02-5 CAPLUS
CN 1-PhtHALAZINamine, N-(4-chlorophenyl)-4-[4-(1H-pyrazol-1-yl)phenyl]- (CA INDEX NAME)



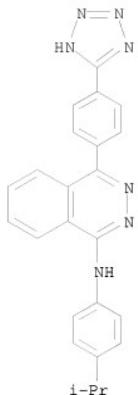
RN 929201-03-6 CAPLUS
CN 1-PhtHALAZINamine, N-[4-(1-methylethyl)phenyl]-4-[4-(1H-pyrazol-1-yl)phenyl]- (CA INDEX NAME)



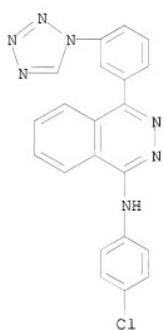
RN 929201-04-7 CAPLUS
CN 1-Phtalazinamine, N-(4-chlorophenyl)-4-[4-(1*H*-imidazol-2-yl)phenyl]- (CA INDEX NAME)



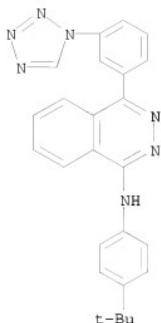
RN 929201-05-8 CAPLUS
CN 1-Phtalazinamine, N-[4-(1-methylethyl)phenyl]-4-[4-(2*H*-tetrazol-5-yl)phenyl]- (CA INDEX NAME)



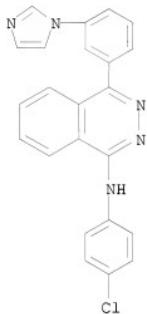
RN 929201-06-9 CAPLUS
CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-[3-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



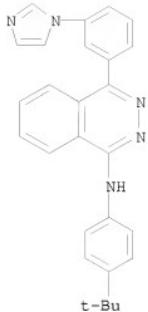
RN 929201-07-0 CAPLUS
CN 1-Phthalazinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-[3-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



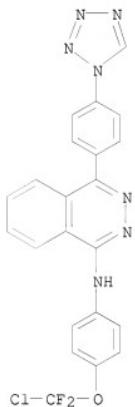
RN 929201-08-1 CAPLUS
CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-[3-(1H-imidazol-1-yl)phenyl]- (CA INDEX NAME)



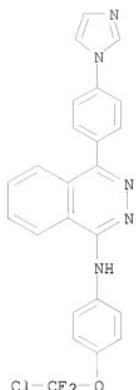
RN 929201-09-2 CAPLUS
CN 1-Phthalazinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-[3-(1H-imidazol-1-yl)phenyl]- (CA INDEX NAME)



RN 1026043-85-5 CAPLUS
CN 1-Phtalazinamine, N-[4-(chlorodifluoromethoxy)phenyl]-4-[4-(1H-tetrazol-1-yl)phenyl]- (CA INDEX NAME)



RN 1026674-06-5 CAPLUS
CN 1-Phtalazinamine, N-[4-(chlorodifluoromethoxy)phenyl]-4-[4-(1H-imidazol-1-yl)phenyl]- (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 21 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1188405 CAPLUS

DOCUMENT NUMBER: 146:27558

TITLE: Catalytic asymmetric synthesis of cyclic α -allylated α -fluoroketones

AUTHOR(S): Burger, E. C.; Barron, B. R.; Tunge, J. A.

CORPORATE SOURCE: Department of Chemistry, University of Kansas, Lawrence, KS, 66045-7582, USA

SOURCE: Synlett (2006), (17), 2824-2826

CODEN: SYNLSE; ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 146:27558

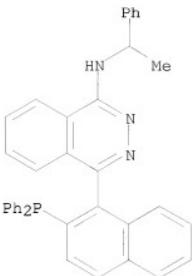
AB This manuscript details the development of an asym., palladium-catalyzed, decarboxylative coupling of fluoroenolates with allyl electrophiles.

IT 828927-97-5

RL: CAT (Catalyst use); USES (Uses)
(stereoselective preparation of allyl fluorocycloalkanone derivs. by asym.
palladium catalyzed decarboxylative allylation reaction of
 β -allyloxycarbonyl fluorocycloalkanones in presence of chiral
phosphine ligands)

RN 828927-97-5 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (1R)- (CA INDEX NAME)



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 22 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:547472 CAPLUS

DOCUMENT NUMBER: 145:283985

TITLE: Autoinduction of MKC-963

$[(R)-1-(1\text{-cyclohexylethylamino})-4\text{-phenylphthalazine}]$ metabolism in healthy volunteers and its retrospective evaluation using primary human hepatocytes and cDNA-expressed enzymes

AUTHOR(S): Shimizu, Toshiyuki; Akimoto, Kei; Yoshimura, Takuya; Niwa, Takuhiro; Kobayashi, Kaoru; Tsunoo, Michio; Chiba, Kan

CORPORATE SOURCE: Pharmacokinetics Laboratory, Mitsubishi Pharma Corporation, Chiba, Kisarazu-shi, Japan

SOURCE: Drug Metabolism and Disposition (2006), 34(6), 950-954
CODEN: DMDSAI; ISSN: 0090-9556

PUBLISHER: American Society for Pharmacology and Experimental Therapeutics

DOCUMENT TYPE: Journal
LANGUAGE: English

AB MKC-963, (R) -1-(1-cyclohexylethylamino)-4-phenylphthalazine, a potent inhibitor of platelet aggregation, was synthesized and used in clin. trials in the 1990s. In the process of clin. study, it was found that urinary excretion ratios for 6β -hydroxycortisol and free cortisol increased significantly in parallel with decreases in the blood plasma concns. of MKC-963 after repeated oral administration of the compound to healthy volunteers. These findings suggested that MKC-963 caused autoinduction (defined as the ability of a drug to induce enzymes that enhance its own metabolism, resulting in dispositional tolerance) in humans, and clin. studies using the compound were stopped. This experience prompted us to reevaluate the effects of this compound on CYP3A4 using primary human hepatocytes and cDNA-expressed human cytochrome P 450 (P 450) enzymes to determine whether the autoinduction of MKC-963 metabolism in humans could be predicted if these in vitro systems had been used for the evaluation of MKC-963 in the preclin. study. The results of in vitro study showed that MKC-963 increased CYP3A4 mRNA expression level and activity of testosterone 6β -hydroxylation to extents similar to those observed with rifampicin in primary human hepatocytes. In addition, approx. 90% of the MKC-963 metabolism in human liver microsomes was estimated to be attributable

to

CYP3A4. These in vitro findings are in good agreement with the results of

clin. study, suggesting that studies using human hepatocytes and cDNA-expressed human P450s are useful for assessing the autoinductive nature of compds. under development before starting clin. studies.

IT 149549-14-4, MKC 963

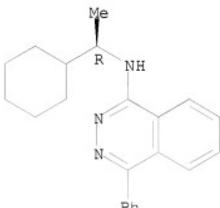
RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(autoinduction of MKC-963 metabolism in healthy volunteers)

RN 149549-14-4 CAPLUS

CN 1-Phtalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 23 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:427368 CAPLUS

DOCUMENT NUMBER: 145:145504

TITLE: Highly Enantioselective Access to Primary Propargyl Amines: 4-Piperidinone as a Convenient Protecting Group

AUTHOR(S): Aschwendan, Patrick; Stephenson, Corey R. J.; Carreira, Erick M.

CORPORATE SOURCE: Laboratorium fuer Organische Chemie, ETH Zurich, Zurich, CH-8093, Switz.

SOURCE: Organic Letters (2006), 8(11), 2437-2440
CODEN: ORLEPF; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:145504

AB A highly enantioselective, catalytic three-component coupling of aldehydes, alkynes, and 4-piperidone hydrochloride hydrate to afford the corresponding tertiary propargyl amines in useful yields is reported. A catalyst system used in this study was copper(I) bromide and 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-1-phthalazinamine. The selective cleavage of the piperidone protecting group using either ammonia/EtOH or a polymer-supported scavenger amine furnishes primary propargyl amines.

IT 828927-96-4 828927-97-5, (R,R)-PINAP 898254-82-5

, (S,S)-PINAP

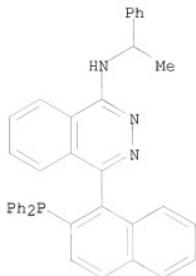
RL: CAT (Catalyst use); USES (Uses)

(enantioselective preparation of propargylamines using three-component coupling of aldehydes, alkynes, and 4,4-piperidinediol hydrochloride in the presence of copper complexes of nonracemic (diphenylphosphinonaphthyl)phthalazinamines (PINAP))

RN 828927-96-4 CAPLUS

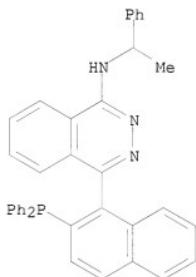
CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-

phenylethyl]-, (1S)- (CA INDEX NAME)



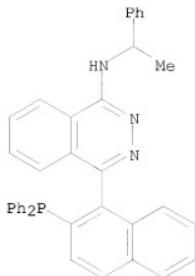
RN 828927-97-5 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (1R)- (CA INDEX NAME)



RN 898254-82-5 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1S)-1-phenylethyl]-, (4S)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 24 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:213386 CAPLUS
 DOCUMENT NUMBER: 144:286183
 TITLE: Endothelin a receptor (eta) antagonists in combination with phosphodiesterase 5 inhibitors (pde5) and uses thereof
 INVENTOR(S): Keyser, Donald Jeffrey; Dixon, Richard
 PATENT ASSIGNEE(S): Encysive Pharmaceuticals, USA
 SOURCE: PCT Int. Appl., 43 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2006026395 | A1 | 20060309 | WO 2005-US30342 | 20050826 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, IT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| US 20060205733 | A1 | 20060914 | US 2005-211099 | 20050825 |
| AU 2005280077 | A1 | 20060309 | AU 2005-280077 | 20050826 |
| CA 2578044 | A1 | 20060309 | CA 2005-2578044 | 20050826 |
| EP 1789051 | A1 | 20070530 | EP 2005-792498 | 20050826 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| CN 101072564 | A | 20071114 | CN 2005-8003468 | 20050826 |
| JP 2008510830 | T | 20080410 | JP 2007-530143 | 20050826 |
| BR 2005014666 | A | 20080617 | BR 2005-14666 | 20050826 |
| MX 2007002311 | A | 20080310 | MX 2007-2311 | 20070226 |

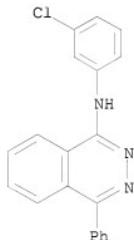
| | | | |
|------------------------|------------|-----------------|------------|
| NO 2007001446 | A 20070326 | NO 2007-1446 | 20070316 |
| KR 2007074552 | A 20070712 | KR 2007-706248 | 20070319 |
| IN 2007KN01040 | A 20070713 | IN 2007-KN1040 | 20070323 |
| PRIORITY APPLN. INFO.: | | US 2004-604462P | P 20040826 |
| | | US 2005-211099 | A 20050825 |
| | | WO 2005-US30342 | W 20050826 |

AB The invention relates generally to combination therapies comprising an endothelin A receptor (ETA) antagonist and a phosphodiesterase 5 (PDE5) inhibitor, pharmaceutical compns. comprising ETA antagonist and PDE5 inhibitor and methods of treating various disorders comprising administering an ETA antagonist and a PDE5 inhibitor. In particular, the combination therapies and pharmaceutical compns. are useful for the treatment and/or prevention of cardiac disorders such as pulmonary arterial hypertension (PAH). No significant pharmacokinetic interactions between sitaxsentan and sildenafil were demonstrated in healthy volunteers.

IT 78351-75-4, MY-5445
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ETA antagonists and PDE5 inhibitors for treating vascular disorders)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 25 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:128500 CAPLUS
 DOCUMENT NUMBER: 144:266596
 TITLE: Arylphthalazines. Part 2:
 1-(Isoquinolin-5-yl)-4-arylamino phthalazines as potent inhibitors of VEGF receptors I and II
 Duncton, Matthew A. J.; Piatnitski, Evgeni L.; Katoch-Rouse, Reeti; Smith, Leon M.; Kiselyov, Alexander S.; Milligan, Daniel L.; Balagtas, Chris; Wong, Wai C.; Kawakami, Joel; Doody, Jacqueline F.
 Department of Chemistry, ImClone Systems, Brooklyn, NY, 11226, USA
 Bioorganic & Medicinal Chemistry Letters (2006), 16(6), 1579-1581
 CODEN: BMCL8; ISSN: 0960-894X
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 144:266596

AB A novel class of 1-(isoquinolin-5-yl)-4-arylamino-phthalazines is described as inhibitors of vascular endothelial growth factor receptor II (VEGFR-2). Many compds. display VEGFR-2 inhibitory activity with an IC₅₀ as low as 0.017 μM in an HTRF enzymic assay. The compds. also inhibit VEGFR-1, a related tyrosine kinase.

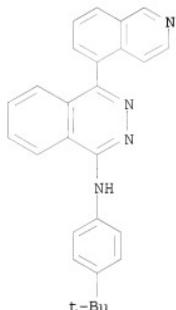
IT 878288-55-2P 878288-56-3P 878288-57-4P
878288-58-5P 878288-59-6P 878288-60-9P
878288-61-0P 878288-62-1P 878288-63-2P
878288-64-3P 878288-65-4P 878288-66-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(isoquinolinyl arylamino phthalazines as potent inhibitors of VEGF receptors I and II)

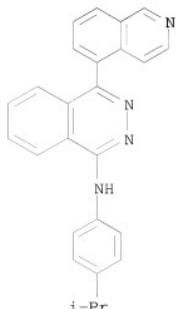
RN 878288-55-2 CAPLUS

CN 1-Phthalazinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-(5-isoquinolinyl)-(CA INDEX NAME)

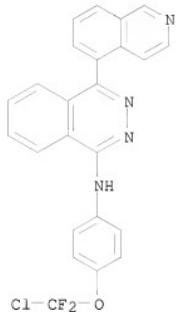


RN 878288-56-3 CAPLUS

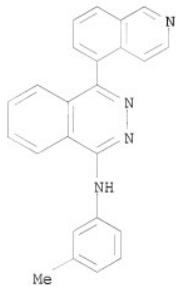
CN 1-Phthalazinamine, 4-(5-isoquinolinyl)-N-[4-(1-methylethyl)phenyl]-(CA INDEX NAME)



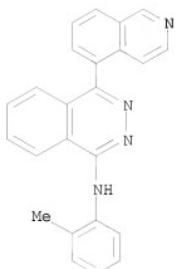
RN 878288-57-4 CAPLUS
CN 1-Phtalazinamine, N-[4-(chlorodifluoromethoxy)phenyl]-4-(5-isoquinolinyl)-
(CA INDEX NAME)



RN 878288-58-5 CAPLUS
CN 1-Phtalazinamine, 4-(5-isoquinolinyl)-N-(3-methylphenyl)- (CA INDEX
NAME)

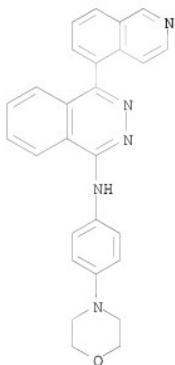


RN 878288-59-6 CAPLUS
CN 1-Phtalazinamine, 4-(5-isoquinolinyl)-N-(2-methylphenyl)- (CA INDEX
NAME)



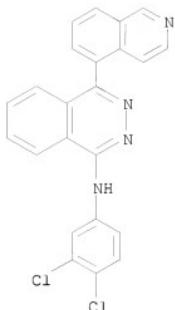
RN 878288-60-9 CAPLUS

CN 1-Phthalazinamine, 4-(5-isoquinolinyloxy)-N-(4-(4-morpholinyl)phenyl)- (CA INDEX NAME)



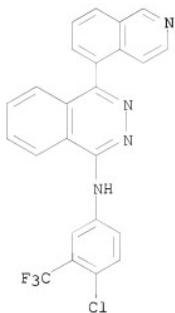
RN 878288-61-0 CAPLUS

CN 1-Phthalazinamine, N-(3,4-dichlorophenyl)-4-(5-isoquinolinyloxy)- (CA INDEX NAME)



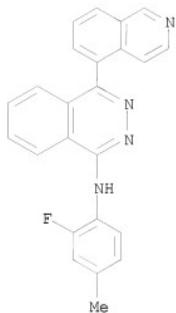
RN 878288-62-1 CAPLUS

CN 1-Phthalazinamine, N-[4-chloro-3-(trifluoromethyl)phenyl]-4-(5-isoquinolinyl)- (CA INDEX NAME)



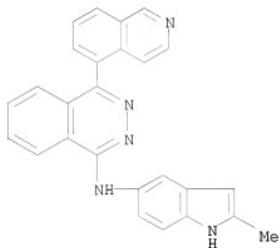
RN 878288-63-2 CAPLUS

CN 1-Phthalazinamine, N-(2-fluoro-4-methylphenyl)-4-(5-isoquinolinyl)- (CA INDEX NAME)



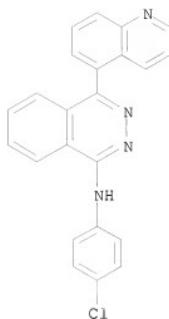
RN 878288-64-3 CAPLUS

CN 1-Phthalazinamine, 4-(5-isoquinolinyl)-N-(2-methyl-1H-indol-5-yl)- (CA INDEX NAME)



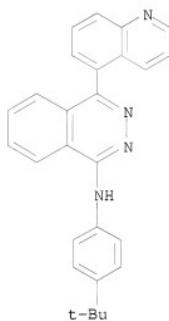
RN 878288-65-4 CAPLUS

CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-(5-quinolinyl)- (CA INDEX NAME)



RN 878288-66-5 CAPLUS

CN 1-Phtalazinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-(5-quinolinyl)- (CA INDEX NAME)



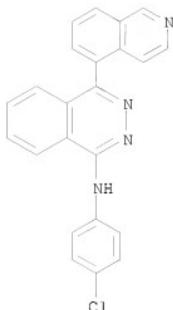
IT 878288-54-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(isoquinolinyl arylamino phthalazines as potent inhibitors of VEGF receptors I and II)

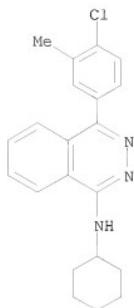
RN 878288-54-1 CAPLUS

CN 1-Phtalazinamine, N-(4-chlorophenyl)-4-(5-isoquinolinyl)- (CA INDEX NAME)

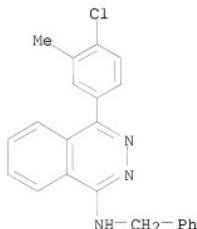


REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 26 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:106618 CAPLUS
 DOCUMENT NUMBER: 146:337822
 TITLE: Synthesis and behaviour of 4-(4'-chloro-3'-methylphenyl)-1(2H)-phthalazinone towards certain electrophiles and nucleophiles
 AUTHOR(S): Kassab, E. A.
 CORPORATE SOURCE: Industrial Education College, Cairo, Egypt
 SOURCE: Egyptian Journal of Chemistry (2005), 48(2), 183-199
 CODEN: EGJCA3; ISSN: 0449-2285
 PUBLISHER: National Information and Documentation Centre
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 146:337822
 AB The behavior of 4-(4'-chloro-3'-methylphenyl)-1(2H)-phthalazinone towards carbon electrophiles, e.g., Et bromoacetate, formaldehyde in the presence of piperidine under Mannich reaction conditions, and carbon nucleophiles, e.g., p-tolylmagnesium bromide under Grignard reaction conditions and chlorination by using PCl5/POCl3, has been investigated. The reaction of the chlorophthalazine derivative with nitrogen nucleophiles, mainly piperidine, pyrrolidine, cyclohexylamine, benzylamine and hydrazine hydrate, is described. The behavior of hydrazinophthalazine derivative towards carbon electrophiles, e.g. aromatic aldehydes, Et acetoacetate and acetylacetone also is discussed.
 IT 929111-45-5P 929111-46-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (behavior of 4-(4'-chloro-3'-methylphenyl)-1(2H)-phthalazinone towards certain electrophiles and nucleophiles)
 RN 929111-45-5 CAPLUS
 CN 1-Phthalazinamine, 4-(4-chloro-3-methylphenyl)-N-cyclohexyl- (CA INDEX NAME)



RN 929111-46-6 CAPLUS
 CN 1-Phthalazinamine, 4-(4-chloro-3-methylphenyl)-N-(phenylmethyl)- (CA
 INDEX NAME)



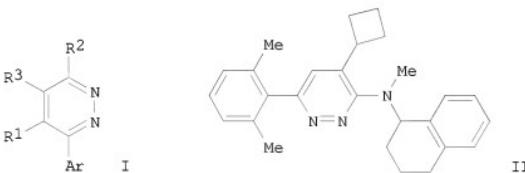
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 27 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:29601 CAPLUS
 DOCUMENT NUMBER: 144:128985
 TITLE: Preparation of 3-aryl-5,6-disubstituted pyridazines as C5a receptor modulators for treating an inflammatory and immune system disorders
 INVENTOR(S): Yoon, Taeyoung; Yuan, Jun; Lee, Kyungae; Maynard, George D.; Liu, Nian
 PATENT ASSIGNEE(S): Neurogen Corporation, USA
 SOURCE: PCT Int. Appl., 135 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|-------|----------|-----------------|----------|
| ----- | ----- | ----- | ----- | ----- |
| WO 2006004589 | A2 | 20060112 | WO 2005-US16139 | 20050506 |

| | | | | |
|---|----|----------|------------------|------------|
| WO 2006004589 | A3 | 20060406 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BE, BJ, CF,
CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM,
KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG,
KZ, MD, RU, TJ, TM | | | | |
| AU 2005260102 | A1 | 20060112 | AU 2005-260102 | 20050506 |
| CA 2564996 | A1 | 20060112 | CA 2005-2564996 | 20050506 |
| EP 1745039 | A2 | 20070124 | EP 2005-783074 | 20050506 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| CN 1984904 | A | 20070620 | CN 2005-80023119 | 20050506 |
| JP 2007P536276 | T | 20071213 | JP 2007-511702 | 20050506 |
| IN 2006DN07075 | A | 20070831 | IN 2006-DN7075 | 20061124 |
| RITY APPLN. INFO.: | | | US 2004-569108P | P 20040508 |
| | | | WO 2005-US16139 | W 20050506 |

OTHER SOURCE(S): CASREACT 144:128985; MARPAT 144:128985
GI



AB The title compds. I [$R_2 = NR_4R_5$, NR_5R_6 , (CR_aR_b)OR₄, etc.; $R_1 = H$, halo, CN, etc.; $R_3 = halo$, OH, NH₂, etc.; or R_1 and R_3 , taken together, form (un)substituted fused carbocyclic ring; $R_4 = alkyl$, alkenyl, etc.; $R_5 = H$, alkyl, alkenyl, etc.; or $NR_4R_5 = (un)$ substituted heterocycle; $R_6 = (un)$ substituted (carbocycle)alkyl, (benzocarbocycle)alkyl, (heterocycle)alkyl, etc.; or $NR_5R_6 = (un)$ substituted heterocycle; $Ar = (un)$ substituted ortho-substituted Ph, naphthyl, heteroaryl; R_a , $R_b = H$, OH, alkyl, etc.], useful for treating an inflammatory and immune system disorders, were prepared E.g., a multi-step synthesis of II, starting from 3,6-dichloropyridazine, was given. The pharmaceutical compns. comprising I are disclosed. The compds. I can be useful as probes for the localization of C5a receptors.

| | | | |
|----|--------------|--------------|--------------|
| IT | 209416-23-9P | 873216-65-0P | 873216-66-1P |
| | 873216-68-3P | 873216-72-9P | 873216-73-0P |
| | 873216-74-1P | 873216-75-2P | 873216-76-3P |
| | 873216-78-5P | 873216-79-6P | 873216-80-9P |
| | 873216-81-0P | 873216-82-1P | 873216-84-3P |
| | 873216-85-4P | 873216-86-5P | 873216-87-6P |
| | 873216-89-8P | 873216-91-2P | 873216-92-3P |
| | 873216-93-4P | 873216-94-5P | 873216-95-6P |
| | 873216-96-7P | 873216-97-8P | 873216-99-0P |
| | 873217-00-6P | 873217-01-7P | 873217-02-8P |

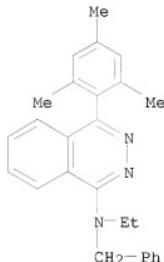
873217-03-9P 873217-06-2P 873217-08-4P
873217-10-8P 873217-12-0P 873217-13-1P
873217-15-3P 873217-16-4P 873217-17-5P
873217-18-6P 873217-20-0P 873217-23-3P
873217-26-6P 873217-28-8P 873217-29-9P
873217-30-2P 873217-31-3P 873217-32-4P
873217-33-5P 873217-34-6P 873217-35-7P
873217-36-8P 873217-37-9P 873217-39-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-aryl-5,6-disubstituted pyridazines as C5a receptor modulators for treating an inflammatory and immune system disorders)

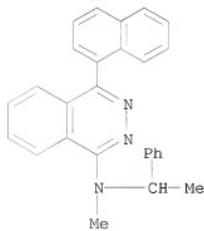
RN 209416-23-9 CAPLUS

CN 1-Phthalazinamine, N-ethyl-N-(phenylmethyl)-4-(2,4,6-trimethylphenyl)-(CA INDEX NAME)



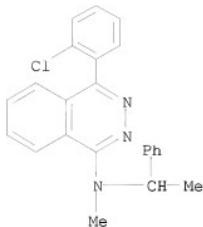
RN 873216-65-0 CAPLUS

CN 1-Phthalazinamine, N-methyl-4-(1-naphthalenyl)-N-(1-phenylethyl)-(CA INDEX NAME)

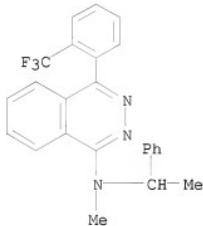


RN 873216-66-1 CAPLUS

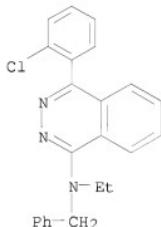
CN 1-Phthalazinamine, 4-(2-chlorophenyl)-N-methyl-N-(1-phenylethyl)-(CA INDEX NAME)



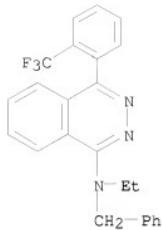
RN 873216-68-3 CAPLUS
 CN 1-Phtalazinamine, N-methyl-N-(1-phenylethyl)-4-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 873216-72-9 CAPLUS
 CN 1-Phtalazinamine, 4-(2-chlorophenyl)-N-ethyl-N-(phenylmethyl)- (CA INDEX NAME)



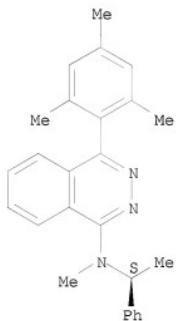
RN 873216-73-0 CAPLUS
 CN 1-Phtalazinamine, N-ethyl-N-(phenylmethyl)-4-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 873216-74-1 CAPLUS

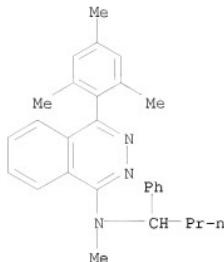
CN 1-Phthalazinamine, N-methyl-N-[(1S)-1-phenylethyl]-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

Absolute stereochemistry.



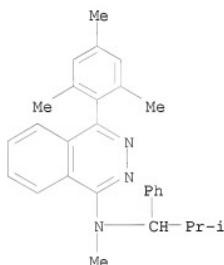
RN 873216-75-2 CAPLUS

CN 1-Phthalazinamine, N-methyl-N-(1-phenylbutyl)-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



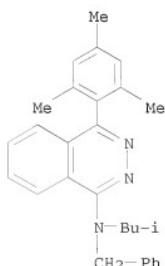
RN 873216-76-3 CAPLUS

CN 1-Phtalazinamine, N-methyl-N-(2-methyl-1-phenylpropyl)-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

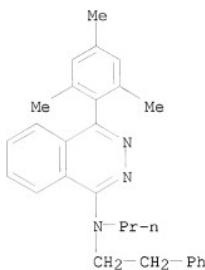


RN 873216-78-5 CAPLUS

CN 1-Phtalazinamine, N-(2-methylpropyl)-N-(phenylmethyl)-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

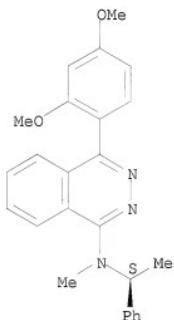


RN 873216-79-6 CAPLUS
CN 1-Phtalazinamine, N-(2-phenylethyl)-N-propyl-4-(2,4,6-trimethylphenyl)-
(CA INDEX NAME)

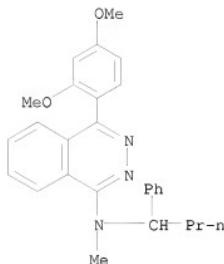


RN 873216-80-9 CAPLUS
CN 1-Phtalazinamine, 4-(2,4-dimethoxyphenyl)-N-methyl-N-[(1S)-1-phenylethyl]-
(CA INDEX NAME)

Absolute stereochemistry.

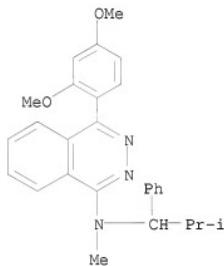


RN 873216-81-0 CAPLUS
CN 1-Phtalazinamine, 4-(2,4-dimethoxyphenyl)-N-methyl-N-(1-phenylbutyl)-
(CA INDEX NAME)



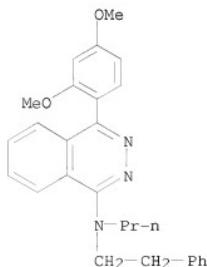
RN 873216-82-1 CAPLUS

CN 1-Phtalazinamine, 4-(2,4-dimethoxyphenyl)-N-methyl-N-(2-methyl-1-phenylpropyl)- (CA INDEX NAME)



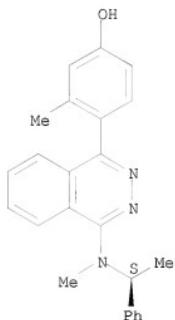
RN 873216-84-3 CAPLUS

CN 1-Phtalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2-phenylethyl)-N-propyl- (CA INDEX NAME)

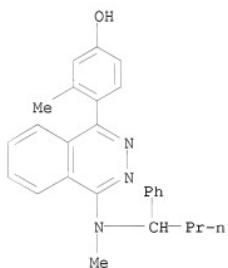


RN 873216-85-4 CAPLUS
CN Phenol, 3-methyl-4-[4-[methyl[(1S)-1-phenylethyl]amino]-1-phthalazinyl]-
(CA INDEX NAME)

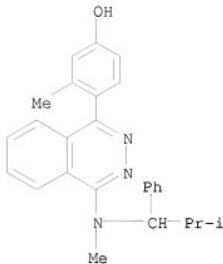
Absolute stereochemistry.



RN 873216-86-5 CAPLUS
CN Phenol, 3-methyl-4-[4-[methyl(1-phenylbutyl)amino]-1-phthalazinyl]- (CA
INDEX NAME)

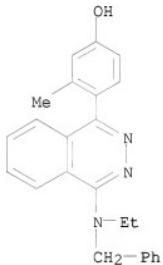


RN 873216-87-6 CAPLUS
CN Phenol, 3-methyl-4-[4-[methyl(2-methyl-1-phenylpropyl)amino]-1-
phthalazinyl]- (CA INDEX NAME)



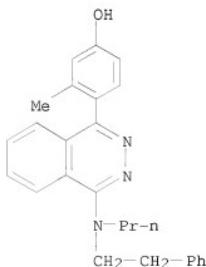
RN 873216-89-8 CAPLUS

CN Phenol, 4-(4-[(ethyl(phenylmethyl)amino)-1-phthalazinyl]-3-methyl- (CA INDEX NAME)

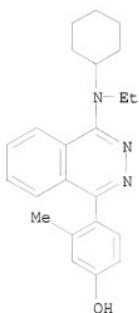


RN 873216-91-2 CAPLUS

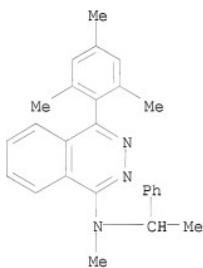
CN Phenol, 3-methyl-4-[(2-phenylethyl)propylamino]-1-phthalazinyl- (CA INDEX NAME)



RN 873216-92-3 CAPLUS
CN Phenol, 4-[4-(cyclohexylethylamino)-1-phthalazinyl]-3-methyl- (CA INDEX NAME)

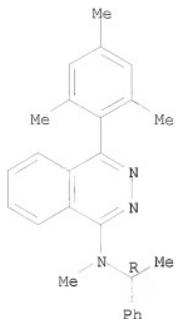


RN 873216-93-4 CAPLUS
CN 1-Phthalazinamine, N-methyl-N-(1-phenylethyl)-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



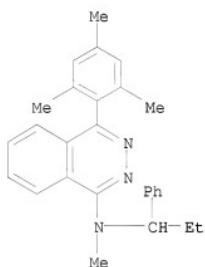
RN 873216-94-5 CAPLUS
CN 1-Phthalazinamine, N-methyl-N-[(1R)-1-phenylethyl]-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

Absolute stereochemistry.



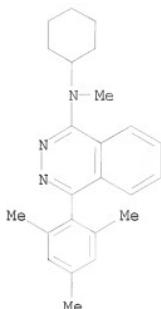
RN 873216-95-6 CAPLUS

CN 1-Phthalazinamine, N-methyl-N-(1-phenylpropyl)-4-(2,4,6-trimethylphenyl)-
(CA INDEX NAME)



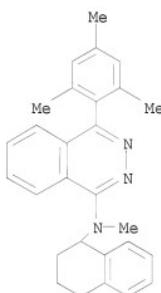
RN 873216-96-7 CAPLUS

CN 1-Phthalazinamine, N-cyclohexyl-N-methyl-4-(2,4,6-trimethylphenyl)- (CA
INDEX NAME)



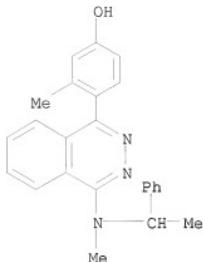
RN 873216-97-8 CAPLUS

CN 1-Phthalazinamine, N-methyl-N-(1,2,3,4-tetrahydro-1-naphthalenyl)-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 873216-99-0 CAPLUS

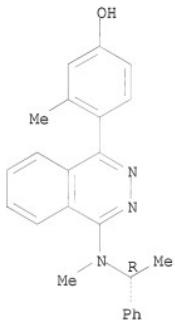
CN Phenol, 3-methyl-4-[4-{methyl(1-phenylethyl)amino}-1-phthalazinyl]- (CA INDEX NAME)



RN 873217-00-6 CAPLUS

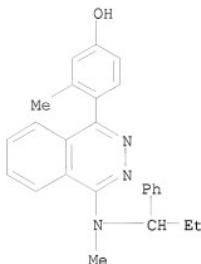
CN Phenol, 3-methyl-4-[4-[methyl((1R)-1-phenylethyl)amino]-1-phthalazinyl]-
(CA INDEX NAME)

Absolute stereochemistry.



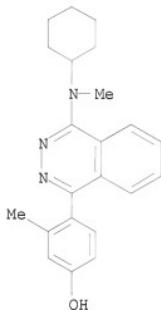
RN 873217-01-7 CAPLUS

CN Phenol, 3-methyl-4-[4-[methyl(1-phenylpropyl)amino]-1-phthalazinyl]-
(CA INDEX NAME)



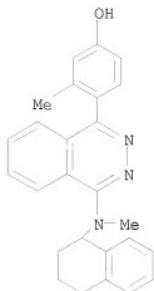
RN 873217-02-8 CAPLUS

CN Phenol, 4-{[(cyclohexylmethyl)amino]methyl}-1-phthalazinyl-3-methyl- (CA INDEX NAME)

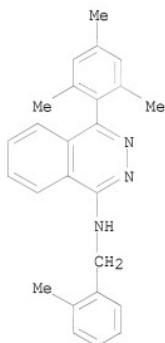


RN 873217-03-9 CAPLUS

CN Phenol, 3-methyl-4-{[4-(methyl(1,2,3,4-tetrahydro-1-naphthalenyl)amino)methyl]-1-phthalazinyl- (CA INDEX NAME)

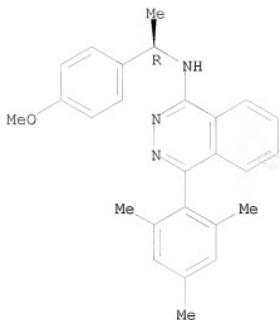


RN 873217-06-2 CAPLUS
CN 1-Phtalazinamine, N-[(2-methylphenyl)methyl]-4-(2,4,6-trimethylphenyl)-
(CA INDEX NAME)



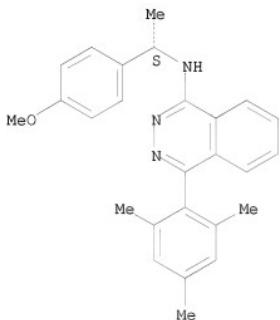
RN 873217-08-4 CAPLUS
CN 1-Phtalazinamine, N-[(1R)-1-(4-methoxyphenyl)ethyl]-4-(2,4,6-
trimethylphenyl)- (CA INDEX NAME)

Absolute stereochemistry.

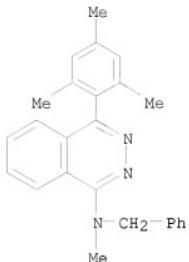


RN 873217-10-8 CAPLUS
CN 1-Phthalazinamine, N-[(1S)-1-(4-methoxyphenyl)ethyl]-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

Absolute stereochemistry.

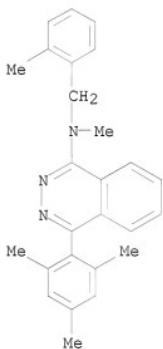


RN 873217-12-0 CAPLUS
CN 1-Phthalazinamine, N-methyl-N-(phenylmethyl)-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



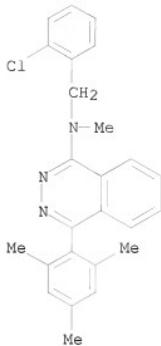
RN 873217-13-1 CAPLUS

CN 1-Phthalazinamine, N-methyl-N-[(2-methylphenyl)methyl]-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



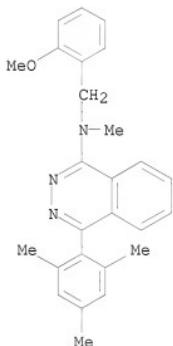
RN 873217-15-3 CAPLUS

CN 1-Phthalazinamine, N-[(2-chlorophenyl)methyl]-N-methyl-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



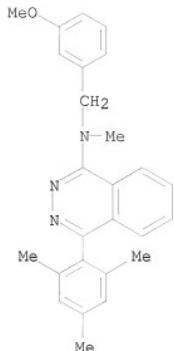
RN 873217-16-4 CAPLUS

CN 1-Phthalazinamine, N-[(2-methoxyphenyl)methyl]-N-methyl-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

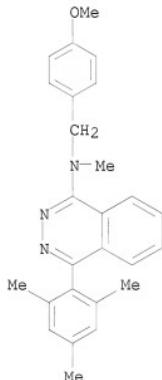


RN 873217-17-5 CAPLUS

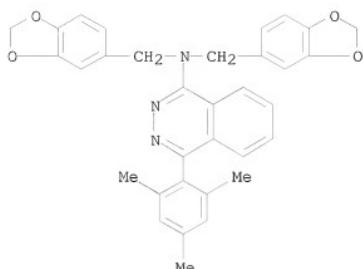
CN 1-Phthalazinamine, N-[(3-methoxyphenyl)methyl]-N-methyl-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 873217-18-6 CAPLUS
CN 1-Phthalazinamine, N-[(4-methoxyphenyl)methyl]-N-methyl-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

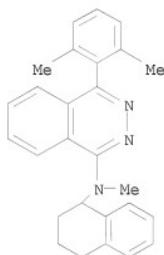


RN 873217-20-0 CAPLUS
CN 1-Phthalazinamine, N,N-bis(1,3-benzodioxol-5-ylmethyl)-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 873217-23-3 CAPLUS

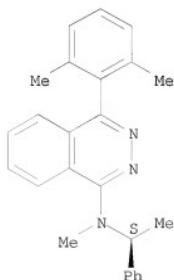
CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-methyl-N-(1,2,3,4-tetrahydro-1-naphthalenyl)- (CA INDEX NAME)



RN 873217-26-6 CAPLUS

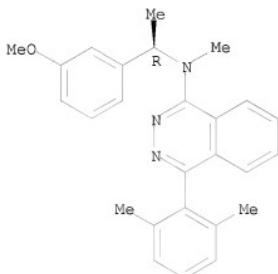
CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-methyl-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

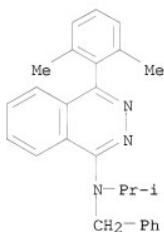


RN 873217-28-8 CAPLUS
CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-[(1R)-1-(3-methoxyphenyl)ethyl]-N-methyl- (CA INDEX NAME)

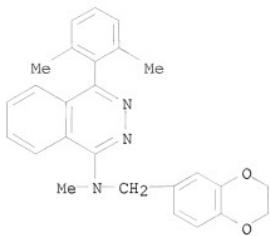
Absolute stereochemistry.



RN 873217-29-9 CAPLUS
CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-(1-methylethyl)-N-(phenylmethyl)- (CA INDEX NAME)

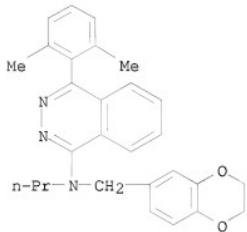


RN 873217-30-2 CAPLUS
CN 1-Phtalazinamine, N-[(2,3-dihydro-1,4-benzodioxin-6-yl)methyl]-4-(2,6-dimethylphenyl)-N-methyl- (CA INDEX NAME)



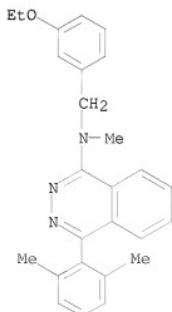
RN 873217-31-3 CAPLUS

CN 1-Phthalazinamine, N-[(2,3-dihydro-1,4-benzodioxin-6-yl)methyl]-4-(2,6-dimethylphenyl)-N-propyl- (CA INDEX NAME)



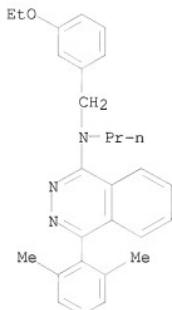
RN 873217-32-4 CAPLUS

CN 1-Phthalazinamine, 4-(2,6-dimethylphenyl)-N-[(3-ethoxyphenyl)methyl]-N-methyl- (CA INDEX NAME)

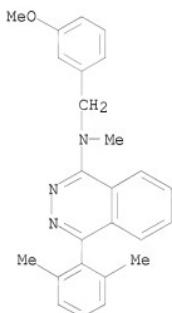


RN 873217-33-5 CAPLUS

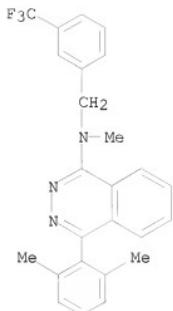
CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-[(3-ethoxyphenyl)methyl]-N-propyl- (CA INDEX NAME)



RN 873217-34-6 CAPLUS
CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-[(3-methoxyphenyl)methyl]-N-methyl- (CA INDEX NAME)

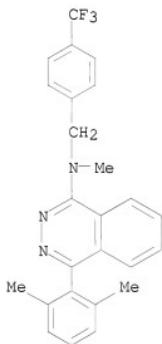


RN 873217-35-7 CAPLUS
CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-methyl-N-[{3-(trifluoromethyl)phenyl}methyl]- (CA INDEX NAME)



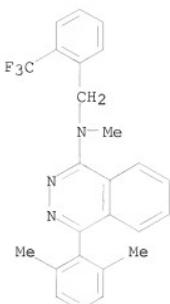
RN 873217-36-8 CAPLUS

CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-methyl-N-[(4-(trifluoromethyl)phenyl)methyl]- (CA INDEX NAME)



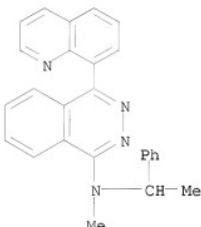
RN 873217-37-9 CAPLUS

CN 1-Phtalazinamine, 4-(2,6-dimethylphenyl)-N-methyl-N-[(2-(trifluoromethyl)phenyl)methyl]- (CA INDEX NAME)



RN 873217-39-1 CAPLUS

CN 1-Phthalazinamine, N-methyl-N-(1-phenylethyl)-4-(8-quinolinyl)- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 28 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1328892 CAPLUS

DOCUMENT NUMBER: 144:51717

TITLE: Axial-chiral 1-phthalazinylnaphthyl monophosphine ligands and their transition metal complexes as asymmetric addition, hydroboration, cyclization and substitution reaction catalysts for production of optically active compounds

INVENTOR(S): Carreira, Erick M.

PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan
SOURCE: PCT Int. Appl., 103 pp.

DOCUMENT TYPE: CODEN: PIXXD2

LANGUAGE: Patent
English

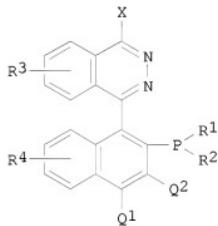
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

| | | | | |
|---|----|----------|------------------|------------|
| WO 2005121157 | A1 | 20051222 | WO 2005-JP10746 | 20050607 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2569849 | A1 | 20051222 | CA 2005-2569849 | 20050607 |
| EP 1773853 | A1 | 20070418 | EP 2005-748497 | 20050607 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU | | | | |
| CN 101098878 | A | 20080102 | CN 2005-80019149 | 20050607 |
| JP 2006347884 | A | 20061228 | JP 2005-170219 | 20050609 |
| IN 2007CN00079 | A | 20070824 | IN 2007-CN79 | 20070108 |
| KR 2007043775 | A | 20070425 | KR 2007-700533 | 20070109 |
| PRIORITY APPLN. INFO.: | | | JP 2004-171833 | A 20040609 |
| | | | US 2004-578735P | P 20040610 |
| | | | JP 2005-148740 | A 20050520 |
| | | | WO 2005-JP10746 | W 20050607 |

OTHER SOURCE(S): CASREACT 144:51717; MARPAT 144:51717
GI



I

AB Phthalazinylnaphthylphosphines I [Q1, Q2 = H, Q1-Q2 = CH:CHCH:CH; R1, R2 = (un)substituted aryl, cyclohexyl, 2- or 3-furyl; R3, R4 = H, Hal, Cl-12 = alkyl(oxy), C3-7 cycloalkyl, aralkyl, C6-20 aryl; X = optionally containing asym. center alkoxy, alkylaminol], useful as ligands for metal-catalyzed asym. reactions, preferably for copper- and rhodium-catalyzed asym. addition, hydroboration, cyclization and allylic substitution, were prepared in the nonracemic axial-chiral form by reaction of 1-(4-halo-R3-phthalazin-1-yl)-2-naphthol with optionally chiral nucleophiles, alcs. HOR5 in the presence of 1-1.5 equiv of base, preferably NaH at 0-40° for 4-40 h, or with 1-7 equiv of amines H2NR6, preferably without a solvent, at 20-150° for 0.5-40 h; the product was then converted to triflate by reaction with 1-2 equiv of (CF2SO2)20 in the presence of 1-10 equiv of organic base at -20° to

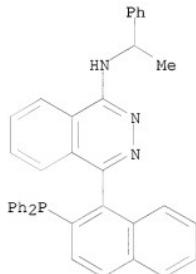
40° for 0.5-40 h; the triflate was then phosphinated by 1-3 equiv of HPIR1R2 (same R) in the presence of metal complex catalyst [preferably NiCl₂(dppe)] and 3-10 equiv of organic base; the synthesis was followed by separation of diastereomers, affording axial-chiral compds. I. The ligands I were used in copper-catalyzed asym. condensation of aldehydes R'CHO with amines R8R9NH [R7, R8, R9 = (un)saturated C1-12 (cyclo)alkyl, C6-20 aryl, heteroaryl] with HC.tplbond.CR10 [R10 = H, trialkylsilyl, alkyl, (hetero)aryl] to produce chiral compds. R10C.tplbond.CCHR7(NR8R9); rhodium-catalyzed hydroboration and diboration of prochiral alkenes in preparation of chiral alcs. and diols; conjugate addition to 5-alkylidene-Meldrum acid or 5-alkylidenebarbiturate; asym. allylic substitution. In an example, reaction of 2.63 mmol of H₂PhH₂ with 3.81 mmol of 1-[4-[(R)-1-phenylethoxy]-phthalazin-1-yl]-2-naphthyl triflate in the presence of 0.381 mmol of NiCl₂(dppe) in 40 mL of DMF at 100° for 11 h afforded (1S)-(-)-I [3, Q1 = Q2 = R3 = R4 = H; R1 = R2 = Ph, X = (R)-OCHPhMe] with 55% yield. In another example, (S)-1-phenylethanol was obtained with 73% yield and 92% ee by hydroboration of styrene by catecholborane, catalyzed by rhodium complex of 3, which was prepared by reaction of 0.1 mmol of [Rh(COD)₂]BF₄ and 0.105 mmol of 3 in 5 mL of CH₂C₁₂ at ambient temperature for 20 min; the hydroborated product was oxidized by 1 mL of 30% aqueous H₂O₂.

IT 828927-97-5P 862307-35-5P

RL: CAT (Catalyst use); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (axial-chiral 1-phthalazinyl-2-naphthyl monophosphines as ligands for transition metal-catalyzed asym. condensation, boration, addition and allylic substitution reactions)

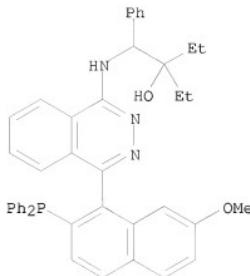
RN 828927-97-5 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (1R)- (CA INDEX NAME)



RN 862307-35-5 CAPLUS

CN Benzeneethanol, β-[(4R)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]-α,α-diethyl-, (βR)- (9CI) (CA INDEX NAME)



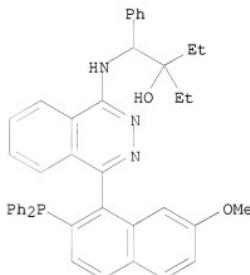
IT 862307-36-6P 862307-37-7P 870814-52-1P
870814-53-2P 870814-57-6P 870814-58-7P

RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)

(axial-chiral 1-phthalazinyl-2-naphthyl monophosphines as ligands for transition metal-catalyzed asym. condensation, boration, addition and allylic substitution reactions)

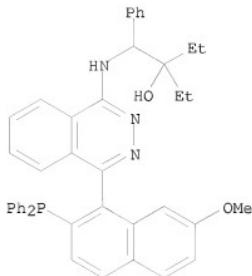
RN 862307-36-6 CAPLUS

CN Benzeneethanol, β -[[(4S)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]- α,α -diethyl-, (βR)-
(9CI) (CA INDEX NAME)



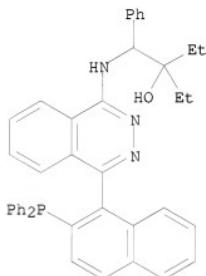
RN 862307-37-7 CAPLUS

CN Benzeneethanol, β -[[(4S)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]- α,α -diethyl-, (βS)-
(CA INDEX NAME)



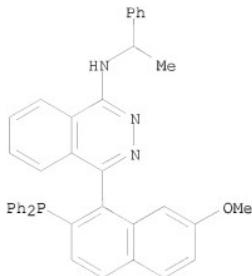
RN 870814-52-1 CAPLUS

CN Benzeneethanol, β -[4-[2-(diphenylphosphino)-1-naphthalenyl]-1-phthalazinyl]amino- α,α -diethyl-, stereoisomer (9CI) (CA INDEX NAME)

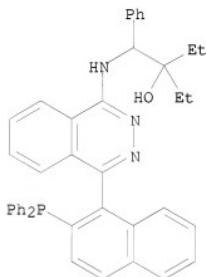


RN 870814-53-2 CAPLUS

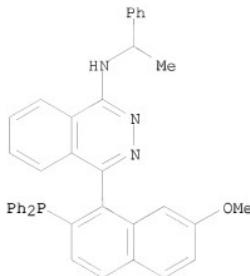
CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (4R)- (9CI) (CA INDEX NAME)



RN 870814-57-6 CAPLUS
CN Benzeneethanol, β -[4-[2-(diphenylphosphino)-1-naphthalenyl]-1-phthalazinyl]amino- α,α -diethyl-, stereoisomer (9CI) (CA INDEX NAME)



RN 870814-58-7 CAPLUS
CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (4S)- (CA INDEX NAME)



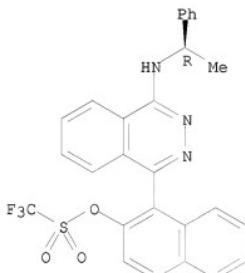
IT 828300-90-9P 862123-05-5P 870766-71-5P
 870766-72-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (axial-chiral 1-phthalazinyl-2-naphthyl monophosphines as ligands for transition metal-catalyzed asym. condensation, boration, addition and allylic substitution reactions)

RN 828300-90-9 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
 1-[4-[(1R)-1-phenylethyl]amino]-1-phthalazinyl]-2-naphthalenyl ester (CA INDEX NAME)

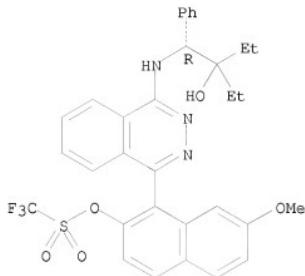
Absolute stereochemistry.



RN 862123-05-5 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
 1-[4-[(1R)-2-ethyl-2-hydroxy-1-phenylbutyl]amino]-1-phthalazinyl]-7-methoxy-2-naphthalenyl ester (CA INDEX NAME)

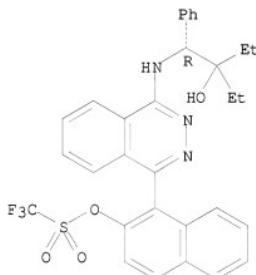
Absolute stereochemistry.



RN 870766-71-5 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
1-[4-[(1R)-2-ethyl-2-hydroxy-1-phenylbutyl]amino]-1-phthalazinyl-2-
naphthalenyl ester (CA INDEX NAME)

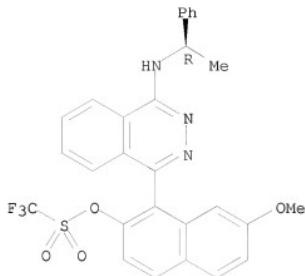
Absolute stereochemistry.



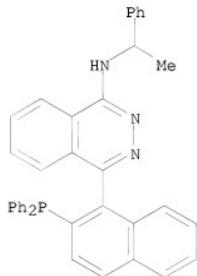
RN 870766-72-6 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
7-methoxy-1-[4-[(1R)-1-phenylethyl]amino]-1-phthalazinyl-2-naphthalenyl
ester (CA INDEX NAME)

Absolute stereochemistry.



IT 828927-96-4P
 RL: CAT (Catalyst use); PRP (Properties); PUR (Purification or recovery);
 SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (crystal structure, absolute configuration; axial-chiral
 1-phthalazinyl-2-naphthyl monophosphines as ligands for transition
 metal-catalyzed asym. condensation, boration, addition and allylic
 substitution reactions)
 RN 828927-96-4 CAPLUS
 CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-
 phenylethyl]-, (1S)- (CA INDEX NAME)

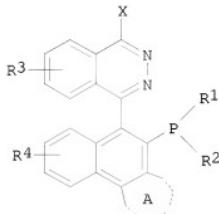


REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 29 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1309191 CAPLUS
 DOCUMENT NUMBER: 144:36427
 TITLE: Preparation of monophosphine compound, transition metal complex thereof, and production method of optically active compound using the complex as asymmetric catalyst
 Carreira, Erick M.
 INVENTOR(S): Carreira, Erick M.
 PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan
 SOURCE: U.S. Pat. Appl. Publ., 34 pp.

DOCUMENT TYPE: CODEN: USXXCO
Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|--------------------------------------|------------------------|
| US 20050277772 | A1 | 20051215 | US 2005-149643
US 2004-578735P | 20050610
P 20040610 |
| PRIORITY APPLN. INFO.: | | | CASREACT 144:36427; MARPAT 144:36427 | |
| OTHER SOURCE(S):
GI | | | | |



I

AB The present invention provides phosphine compound I (ring A = void or a benzene ring optionally having substituent(s); R1, R2 = are each independently a Ph group optionally having substituent(s), a cyclohexyl group, 2-furyl or 3-furyl group and the like; R3, R4 = are each independently H, halo, lower alkyl, lower alkoxy and like; X = a residue represented by alkoxy or organoamino), a asym. transition metal complex containing compound as a ligand and a production method of optically active compound

using the complex as an asym. catalyst. Thus,
(R,M)-3-[(4-(2-diphenylphosphanyl-7-methoxynaphthalen-1-yl)phthalazin-1-ylamino)phenyl-methyl]pentan-3-ol (preparation given) catalyzed and copper(II) acetate monohydrate/sodium (L)-ascorbate mediated reaction of PhC.tpbond.CH with 5-(3-methylbenzylidene)-2,2-dimethyl-1,3-dioxane-4,6-dione at 0° for 66h gave 87%
(S)-(+)-5-(3-phenyl-1-m-tolylprop-2-ynyl)-2,2-dimethyl-1,3-dioxane-4,6-dione.

IT 828927-96-4P 828927-97-5P 862307-35-5P
862307-36-6P 862307-37-7P 870814-52-1P
870814-53-2P 870814-57-6P 870814-58-7P

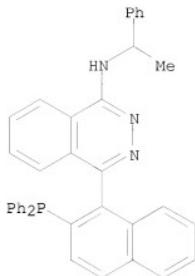
RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of phthalazinyl monophosphine, their transition metal complex, and production method of optically active compound using the complex as asym.

catalyst)

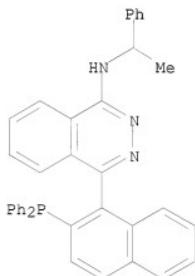
RN 828927-96-4 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (1S)- (CA INDEX NAME)



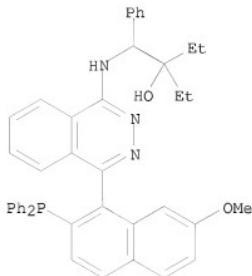
RN 828927-97-5 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (1R)- (CA INDEX NAME)

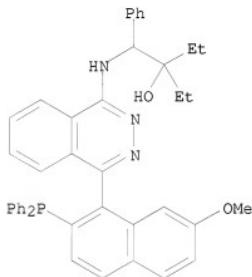


RN 862307-35-5 CAPLUS

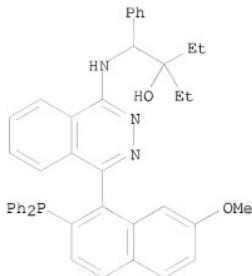
CN Benzeneethanol, beta-[(4R)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]-alpha,alpha-diethyl-, (betaR)- (9CI) (CA INDEX NAME)



RN 862307-36-6 CAPLUS
CN Benzeneethanol, β -[[(4S)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]- α,α -diethyl-, (βR)-
(9CI) (CA INDEX NAME)

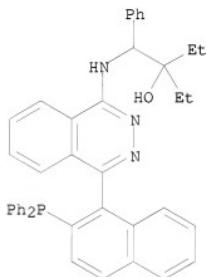


RN 862307-37-7 CAPLUS
CN Benzeneethanol, β -[[(4S)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]- α,α -diethyl-, (βS)-
(CA INDEX NAME)



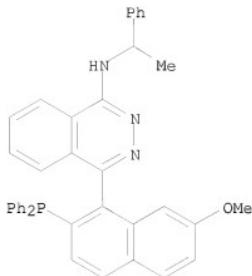
RN 870814-52-1 CAPLUS

CN Benzeneethanol, β -[4-[2-(diphenylphosphino)-1-naphthalenyl]-1-phthalazinyl]amino- α,α -diethyl-, stereoisomer (9CI) (CA INDEX NAME)



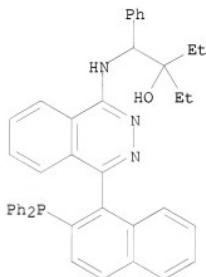
RN 870814-53-2 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (4R)- (9CI) (CA INDEX NAME)



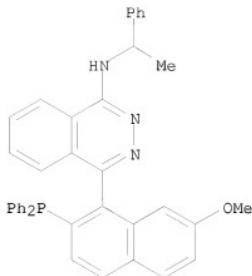
RN 870814-57-6 CAPLUS

CN Benzeneethanol, β -[4-[2-(diphenylphosphino)-1-naphthalenyl]-1-phthalazinyl]amino]- α , α -diethyl-, stereoisomer (9CI) (CA INDEX NAME)



RN 870814-58-7 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (4S)- (CA INDEX NAME)



IT 828300-90-9P 862123-05-5P 870766-71-5P
 870766-72-6P

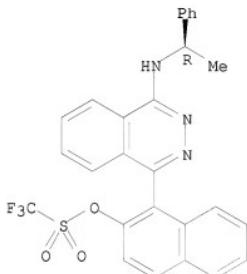
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of phthalazinyl monophosphine, their transition metal complex, and production method of optically active compound using the complex as asym.

catalyst)

RN 828300-90-9 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
 1-[4-[(1R)-1-phenylethyl]amino]-1-phthalazinyl]-2-naphthalenyl ester (CA INDEX NAME)

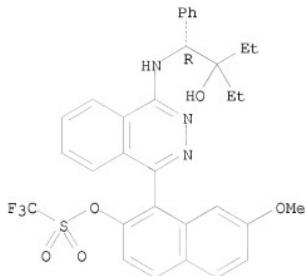
Absolute stereochemistry.



RN 862123-05-5 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
 1-[4-[(1R)-2-ethyl-2-hydroxy-1-phenylbutyl]amino]-1-phthalazinyl]-7-methoxy-2-naphthalenyl ester (CA INDEX NAME)

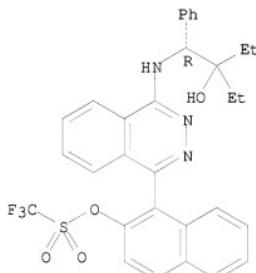
Absolute stereochemistry.



RN 870766-71-5 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
1-[4-[(1*R*)-2-ethyl-2-hydroxy-1-phenylbutyl]amino]-1-phthalazinyl-2-naphthalenyl ester (CA INDEX NAME)

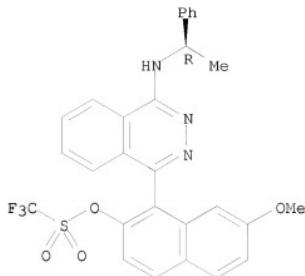
Absolute stereochemistry.



RN 870766-72-6 CAPLUS

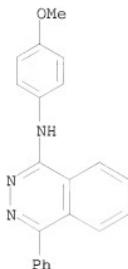
CN Methanesulfonic acid, 1,1,1-trifluoro-,
7-methoxy-1-[4-[(1*R*)-1-phenylethyl]amino]-1-phthalazinyl-2-naphthalenyl ester (CA INDEX NAME)

Absolute stereochemistry.

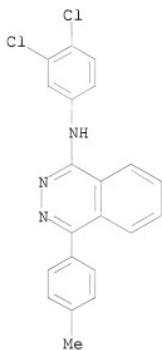


L6 ANSWER 30 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1024908 CAPLUS
 DOCUMENT NUMBER: 143:379079
 TITLE: Arylphthalazines: Identification of a new phthalazine chemotype as inhibitors of VEGFR kinase
 PIATNITSKI, Evgeni L.; DUNCTON, Matthew A. J.;
 KISELYOV, Alexander S.; KATOCH-ROUSE, Reeti; SHERMAN,
 DAN; MILLIGAN, Daniel L.; BALAGTAS, Chris; WONG, Wai
 C.; KAWAKAMI, Joel; DOODY, Jacqueline F.
 Department of Chemistry, ImClone Systems, Brooklyn,
 NY, 11226, USA
 CORPORATE SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),
 15(21), 4696-4698
 SOURCE: CODEN: BMCLB8; ISSN: 0960-894X
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 143:379079
 AB A novel class of 4-arylamino-phthalazin-1-yl-benzamides is described as
 inhibitors of vascular endothelial growth factor receptor II (VEGFR-2).
 Several compds. display potent VEGFR-2 inhibitory activity with an IC50 as
 low as 0.078 μ M in an HTRF enzymic assay. These compds. are relatively
 selective against a small kinase panel.
 IT 78351-69-6P 361998-05-2P 361998-09-6P
 361998-14-3P 361998-89-2P 361999-00-0P
 364625-28-5P 364738-92-1P 372185-63-2P
 374770-60-2P 374920-82-8P 375830-08-3P
 375830-70-9P 375833-86-6P 375837-93-7P
 375840-32-7P 396102-49-1P 405279-18-7P
 442871-52-5P 442871-53-6P 442871-56-9P
 442871-57-0P 442871-58-1P 442871-59-2P
 442871-60-5P 442871-61-6P 442871-62-7P
 442871-63-8P 442871-64-9P 684234-34-2P
 684234-35-3P 684234-36-4P 728030-92-0P
 728030-93-1P 728030-94-2P 866758-14-7P
 866758-23-8P 866758-26-1P 866758-43-2P
 866758-44-3P 866758-45-4P 866758-77-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (identification of a new phthalazine chemotype as inhibitors of VEGFR
 kinase)

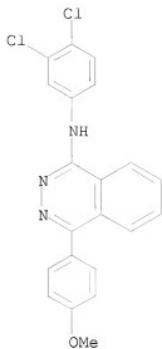
RN 78351-69-6 CAPLUS
CN 1-Phtalazinamine, N-(4-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



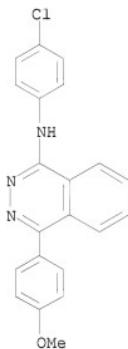
RN 361998-05-2 CAPLUS
CN 1-Phtalazinamine, N-(3,4-dichlorophenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



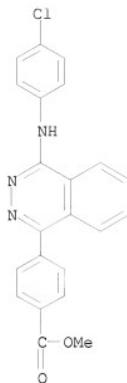
RN 361998-09-6 CAPLUS
CN 1-Phtalazinamine, N-(3,4-dichlorophenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



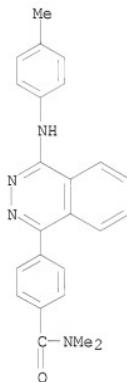
RN 361998-14-3 CAPLUS
CN 1-Phtalazinamine, N-(4-chlorophenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



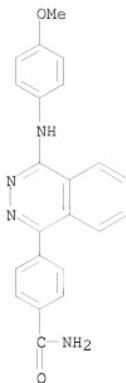
RN 361998-89-2 CAPLUS
CN Benzoic acid, 4-[4-[(4-chlorophenyl)amino]-1-phthalazinyl]-, methyl ester (CA INDEX NAME)



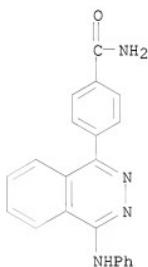
RN 361999-00-0 CAPLUS
CN Benzamide, N,N-dimethyl-4-[4-(4-methoxyphenyl)amino]-1-phthalazinyl- (CA INDEX NAME)



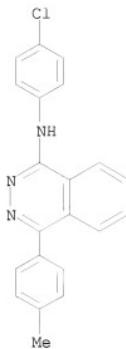
RN 364625-28-5 CAPLUS
CN Benzamide, 4-[4-(4-methoxyphenyl)amino]-1-phthalazinyl- (CA INDEX NAME)



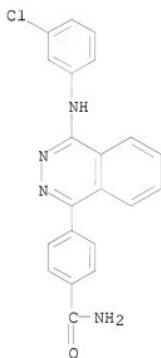
RN 364738-92-1 CAPLUS
CN Benzamide, 4-[4-(phenylamino)-1-phthalazinyl]- (CA INDEX NAME)



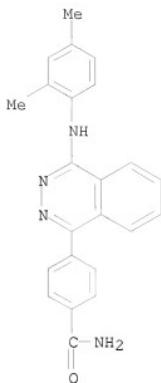
RN 372185-63-2 CAPLUS
CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



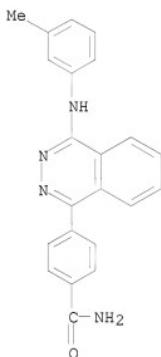
RN 374770-60-2 CAPLUS
CN Benzamide, 4-[4-(3-chlorophenyl)amino]-1-phthalazinyl- (CA INDEX NAME)



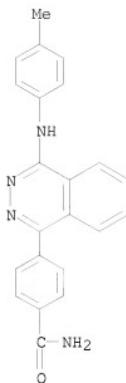
RN 374920-82-8 CAPLUS
CN Benzamide, 4-[4-(2,4-dimethylphenyl)amino]-1-phthalazinyl- (CA INDEX NAME)



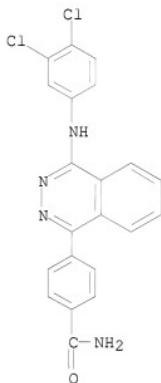
RN 375830-08-3 CAPLUS
CN Benzamide, 4-[4-[(3-methylphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



RN 375830-70-9 CAPLUS
CN Benzamide, 4-[4-[(4-methylphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)

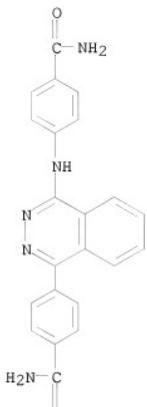


RN 375833-86-6 CAPLUS
CN Benzanide, 4-[4-(3,4-dichlorophenyl)amino]-1-phthalazinyl- (CA INDEX NAME)



RN 375837-93-7 CAPLUS
CN Benzanide, 4-[4-[(4-(aminocarbonyl)phenyl)amino]-1-phthalazinyl- (CA INDEX NAME)

PAGE 1-A



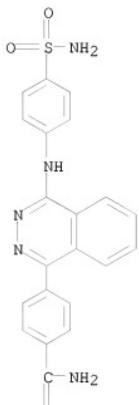
PAGE 2-A



RN 375840-32-7 CAPLUS

CN Benzamide, 4-[4-[(4-(aminosulfonyl)phenyl)amino]-1-phthalazinyl]- (CA
INDEX NAME)

PAGE 1-A



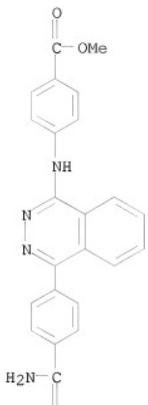
PAGE 2-A



RN 396102-49-1 CAPLUS

CN Benzoic acid, 4-[(4-(aminocarbonyl)phenyl)-1-phthalazinyl]amino]-, methyl ester (CA INDEX NAME)

PAGE 1-A



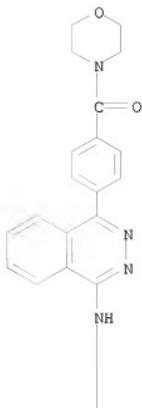
PAGE 2-A



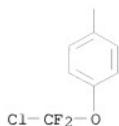
RN 405279-18-7 CAPLUS

CN Methanone, [4-[4-[4-(chlorodifluoromethoxy)phenyl]amino]-1-phthalazinyl]phenyl- (CA INDEX NAME)

PAGE 1-A

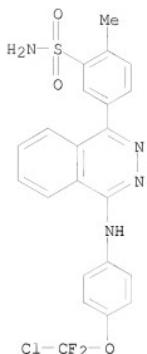


PAGE 2-A



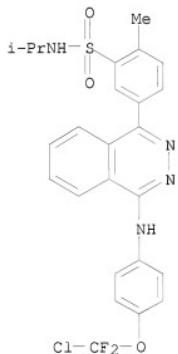
RN 442871-52-5 CAPLUS

CN Benzenesulfonamide, 5-[4-[(4-(chlorodifluoromethoxy)phenyl]amino]-1-phthalazinyl]-2-methyl- (CA INDEX NAME)



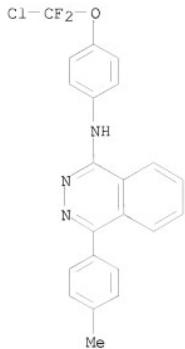
RN 442871-53-6 CAPLUS

CN Benzenesulfonamide, 5-[4-[(4-(chlorodifluoromethoxy)phenyl)amino]-1-phthalazinyl]-2-methyl-N-(1-methylethyl)- (CA INDEX NAME)



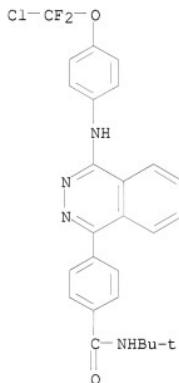
RN 442871-56-9 CAPLUS

CN 1-Phthalazinamine, N-[4-(chlorodifluoromethoxy)phenyl]-4-(4-methylphenyl)- (CA INDEX NAME)



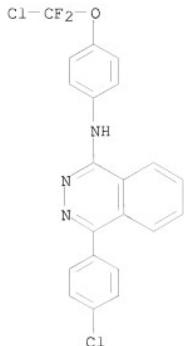
RN 442871-57-0 CAPLUS

CN Benzamide, 4-[4-[(4-(chlorodifluoromethoxy)phenyl)amino]-1-phthalazinyl]-N-(1,1-dimethylethyl)- (CA INDEX NAME)



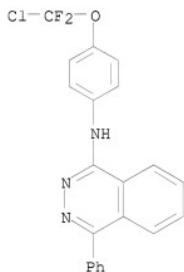
RN 442871-58-1 CAPLUS

CN 1-Phthalazinamine, N-[4-(chlorodifluoromethoxy)phenyl]-4-(4-chlorophenyl)- (CA INDEX NAME)



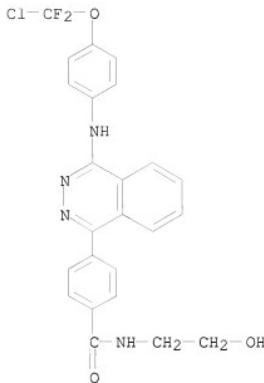
RN 442871-59-2 CAPLUS

CN 1-Phthalazinamine, N-[4-(chlorodifluoromethoxy)phenyl]-4-phenyl- (CA INDEX NAME)

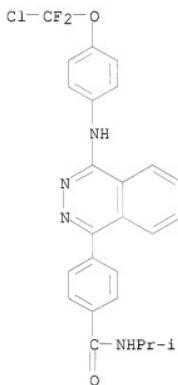


RN 442871-60-5 CAPLUS

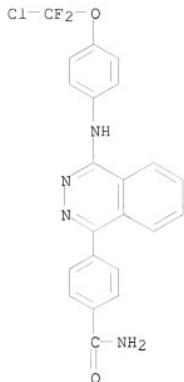
CN Benzamide, 4-[4-[(4-(chlorodifluoromethoxy)phenyl)amino]-1-phthalazinyl]-N-(2-hydroxyethyl)- (CA INDEX NAME)



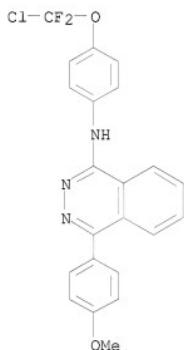
RN 442871-61-6 CAPLUS
CN Benzanide, 4-[4-[(4-(chlorodifluoromethoxy)phenyl]amino]-1-phthalazinyl]-N-(1-methylethyl)- (CA INDEX NAME)



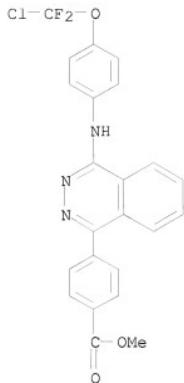
RN 442871-62-7 CAPLUS
CN Benzanide, 4-[4-[(4-(chlorodifluoromethoxy)phenyl]amino]-1-phthalazinyl]- (CA INDEX NAME)



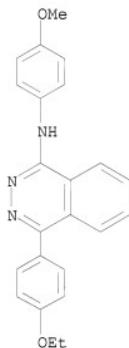
RN 442871-63-8 CAPLUS
CN 1-Phthalazinamine, N-[4-(chlorodifluoromethoxy)phenyl]-4-(4-methoxyphenyl)-
(CA INDEX NAME)



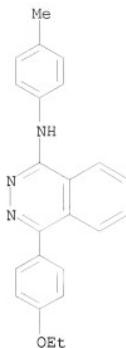
RN 442871-64-9 CAPLUS
CN Benzoic acid, 4-{4-[(4-(chlorodifluoromethoxy)phenyl)amino]-1-phthalazinyl}-, methyl ester (CA INDEX NAME)



RN 684234-34-2 CAPLUS
CN 1-Phthalazinamine, 4-(4-ethoxyphenyl)-N-(4-methoxyphenyl)- (CA INDEX NAME)

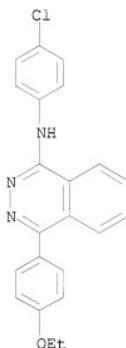


RN 684234-35-3 CAPLUS
CN 1-Phthalazinamine, 4-(4-ethoxyphenyl)-N-(4-methylphenyl)- (CA INDEX NAME)



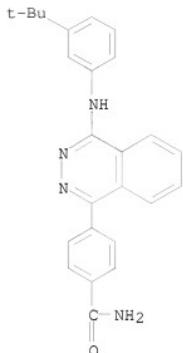
RN 684234-36-4 CAPLUS

CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-(4-ethoxyphenyl)- (CA INDEX NAME)



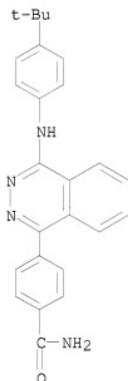
RN 728030-92-0 CAPLUS

CN Benzamide, 4-[4-[(3-(1,1-dimethylethyl)phenyl]amino]-1-phthalazinyl]- (CA INDEX NAME)



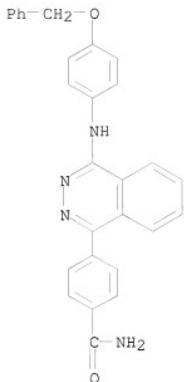
RN 728030-93-1 CAPLUS

CN Benzamide, 4-[4-[(4-(1,1-dimethylethyl)phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



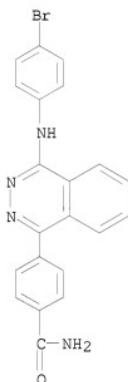
RN 728030-94-2 CAPLUS

CN Benzamide, 4-[4-[(4-(phenylmethoxy)phenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



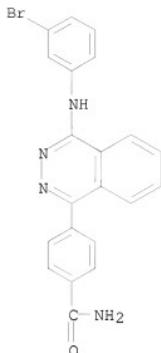
RN 866758-14-7 CAPLUS

CN Benzamide, 4-[4-[(4-bromophenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



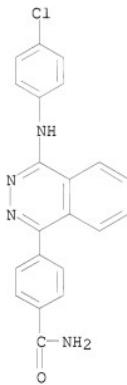
RN 866758-23-8 CAPLUS

CN Benzamide, 4-[4-[(3-bromophenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



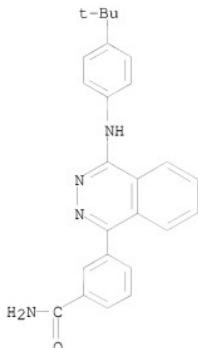
RN 866758-26-1 CAPLUS

CN Benzamide, 4-[4-(4-chlorophenyl)amino]-1-phthalazinyl- (CA INDEX NAME)

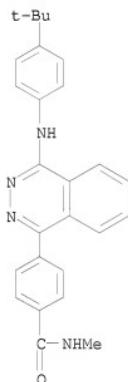


RN 866758-43-2 CAPLUS

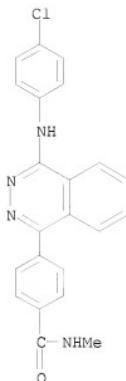
CN Benzamide, 3-[4-[4-(1,1-dimethylethyl)phenyl]amino]-1-phthalazinyl- (CA INDEX NAME)



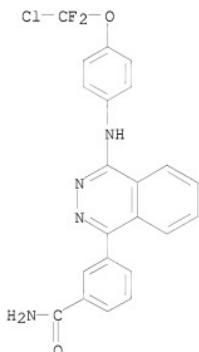
RN 866758-44-3 CAPLUS
CN Benzamide, 4-[4-[(4-(1,1-dimethylethyl)phenyl)amino]-1-phthalazinyl]-N-methyl- (CA INDEX NAME)



RN 866758-45-4 CAPLUS
CN Benzamide, 4-[4-[(4-chlorophenyl)amino]-1-phthalazinyl]-N-methyl- (CA INDEX NAME)



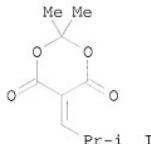
RN 866758-77-2 CAPLUS
 CN Benzamide, 3-[4-[(4-(chlorodifluoromethoxy)phenyl]amino]-1-phthalazinyl]-
 (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 31 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:529457 CAPLUS
 DOCUMENT NUMBER: 143:211448
 TITLE: Catalytic, Enantioselective, Conjugate Alkyne Addition
 AUTHOR(S): Knoepfel, Thomas F.; Zarotti, Pablo; Ichikawa,
 Takashi; Carreira, Erick M.
 CORPORATE SOURCE: Laboratorium fuer Organische Chemie, ETH Hoenggerberg,
 Zurich, CH-8093, Switz.

SOURCE: Journal of the American Chemical Society (2005),
 127(27), 9682-9683
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 143:211448
 GI



AB A copper-catalyzed, enantioselective, conjugate addition involving the direct use of a terminal acetylene, which undergoes *in situ* metalation, is documented. The addition reactions of phenylacetylene to Meldrum's acid derived acceptors, e.g. I, take place in aqueous media, without recourse to inert atmospheric The success of the enantioselective process was enabled by the

use of a new class of conveniently accessed P,N-ligands, which we have termed PINAP. These modular ligands are responsive to numerous electronic and steric modifications that permit optimization of the reaction.

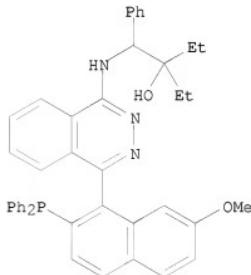
IT 862307-35-5P 862307-37-7P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(catalytic, enantioselective, conjugate alkyne addition)

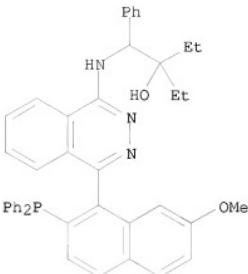
RN 862307-35-5 CAPLUS

CN Benzeneethanol, β -[(4R)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]- α , α -diethyl-, (β R)- (9CI) (CA INDEX NAME)



RN 862307-37-7 CAPLUS

CN Benzeneethanol, β -[(4S)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]- α , α -diethyl-, (β S)- (CA INDEX NAME)



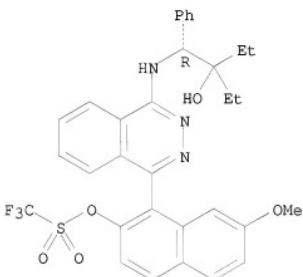
IT 862123-05-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (catalytic, enantioselective, conjugate alkyne addition)

RN 862123-05-5 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
 1-[4-[(1R)-2-ethyl-2-hydroxy-1-phenylbutyl]amino]-1-phthalazinyl]-7-
 methoxy-2-naphthalenyl ester (CA INDEX NAME)

Absolute stereochemistry.

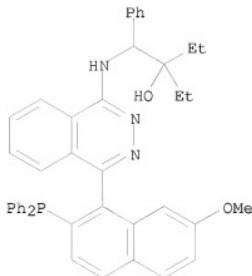


IT 862307-36-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (catalytic, enantioselective, conjugate alkyne addition)

RN 862307-36-6 CAPLUS

CN Benzeneethanol, β -[[(4S)-4-[2-(diphenylphosphino)-7-methoxy-1-naphthalenyl]-1-phthalazinyl]amino]- α , α -diethyl-, (β R)-
 (9CI) (CA INDEX NAME)



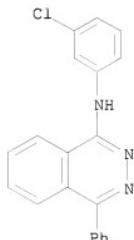
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 32 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:405379 CAPLUS
 DOCUMENT NUMBER: 142:441853
 TITLE: HSP90 inhibitor-phosphodiesterase inhibitor combination for treating or preventing neoplasia
 INVENTOR(S): Masferrer, Jaime L.; Penning, Thomas D.; Wang, Xing; Heuvelman, Deborah M.
 PATENT ASSIGNEE(S): Pharmacia Corporation, USA
 SOURCE: PCT Int. Appl., 178 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2005041879 | A2 | 20050512 | WO 2004-US35949 | 20041028 |
| WO 2005041879 | A3 | 20051006 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2543503 | A1 | 20050512 | CA 2004-2543503 | 20041028 |
| EP 1682143 | A2 | 20060726 | EP 2004-817484 | 20041028 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| BR 2004015896 | A | 20070109 | BR 2004-15896 | 20041028 |
| JP 2007509968 | T | 20070419 | JP 2006-538292 | 20041028 |
| MX 2006004657 | A | 20060627 | MX 2006-4657 | 20060426 |
| PRIORITY APPLN. INFO.: | | | US 2003-515021P | P 20031028 |
| | | | WO 2004-US35949 | W 20041028 |

OTHER SOURCE(S): MARPAT 142:441853

AB A method for treating or preventing neoplasia or a neoplasia-related disorder in a subject is provided, the method comprising administering to the subject an effective amount of a combination comprising an HSP90 inhibitor and a phosphodiesterase inhibitor, and optionally a COX-2 inhibitor. Preparation of, e.g. 4[(2-(4-fluorophenyl)phenyl]benzenesulfonamide, is described.
IT 78351-75-4, MY-5445
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (HSP90 inhibitor-phosphodiesterase inhibitor combination for treating or preventing neoplasia)
RN 78351-75-4 CAPLUS
CN 1-Phtalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 33 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:324289 CAPLUS
DOCUMENT NUMBER: 142:367707
TITLE: Hedgehog pathway antagonists for treatment of proliferative disorders
INVENTOR(S): Beachy, Philip A.; Chen, James K.; Taipale, Anssi J.
PATENT ASSIGNEE(S): The Johns Hopkins University, USA
SOURCE: PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2005033288 | A2 | 20050414 | WO 2004-US32482 | 20040929 |
| WO 2005033288 | A3 | 20051013 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,

SN, TD, TG
 US 20070232661 A1 20071004 US 2007-573945 20070307
 PRIORITY APPLN. INFO.: US 2003-507164P P 20030929
 WO 2004-US32482 W 20040929

OTHER SOURCE(S): MARPAT 142:367707

AB Aromatic compds. for treating various diseases and pathologies are disclosed. The methods for use of such compds. are also provided. Accordingly, the present invention makes available methods and compns. for inhibiting aberrant growth states resulting from hedgehog gain-of-function, ptc loss-of-function or smoothened gain-of-function.

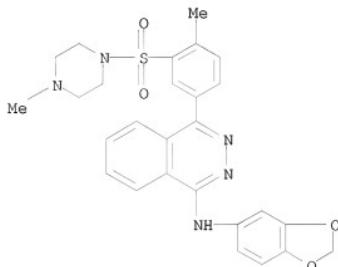
IT 371137-57-4 374920-50-0 375839-96-6

442648-06-8 442648-78-4 442648-80-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aromatic compds. for treatment of cell proliferative disorders by inhibiting hedgehog signaling)

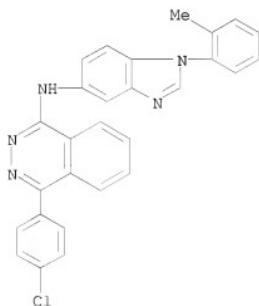
RN 371137-57-4 CAPLUS

CN 1-Phtalazinamine, N-1,3-benzodioxol-5-yl-4-[4-methyl-3-[(4-methyl-1-piperazinyl)sulfonyl]phenyl]- (CA INDEX NAME)



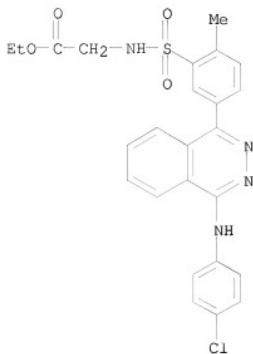
RN 374920-50-0 CAPLUS

CN 1-Phtalazinamine, 4-(4-chlorophenyl)-N-[1-(2-methylphenyl)-1H-benzimidazol-5-yl]- (CA INDEX NAME)

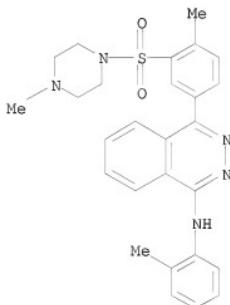


RN 375839-96-6 CAPLUS

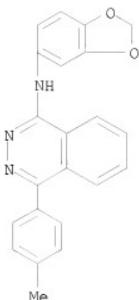
CN Glycine, N-[5-{4-[(4-chlorophenyl)amino]-1-phthalazinyl}-2-methylphenyl]sulfonyl-, ethyl ester (CA INDEX NAME)



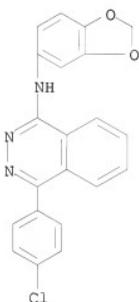
RN 442648-06-8 CAPLUS
CN 1-Phthalazinamine, 4-[4-methyl-3-[(4-methyl-1-piperazinyl)sulfonyl]phenyl]-N-(2-methylphenyl)- (CA INDEX NAME)



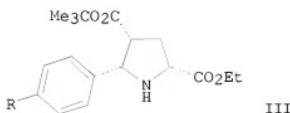
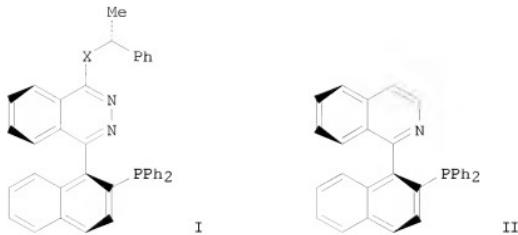
RN 442648-78-4 CAPLUS
CN 1-Phthalazinamine, N-1,3-benzodioxol-5-yl-4-(4-methylphenyl)- (CA INDEX NAME)



RN 442648-80-8 CAPLUS
CN 1-Phthalazinamine, N-1,3-benzodioxol-5-yl-4-(4-chlorophenyl)- (CA INDEX NAME)



L6 ANSWER 34 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:1044913 CAPLUS
DOCUMENT NUMBER: 142:155899
TITLE: Readily available biaryl P,N ligands for asymmetric catalysis
AUTHOR(S): Knoepfel, Thomas F.; Aschwanden, Patrick; Ichikawa, Takashi; Watanabe, Takumi; Carreira, Erick M.
CORPORATE SOURCE: Laboratorium fuer Organische Chemie, ETH Hoenggerberg, HCI H335, Zurich, 8093, Switz.
SOURCE: Angewandte Chemie, International Edition (2004), 43(44), 5971-5973
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:155899
GI



AB Nonracemic phthalazinylnaphthyldiphenylphosphine ligands such as I ($X = O, NH$) are prepared as P,N-ligands more readily accessible than the effective isoquinolinylnaphthyldiphenylphosphine II (quinap); I ($X = O, NH$) are effective ligands in enantioselective rhodium-catalyzed hydroboration, stereo- and enantioselective silver-catalyzed [3+2] cycloaddn., and enantioselective copper-catalyzed alkyne addition to imines. Arylation of 1,4-dichloropyridazine with 2-naphthol in the presence of aluminum trichloride yields a chlorophthalazinylnaphthol. Displacement of the phthalazinyl chloride in the chlorophthalazinylnaphthol intermediate with (R)-1-phenylethanol, triflation of the naphthol, nickel-catalyzed coupling of the aryl triflate with diphenylphosphine, and separation of the diastereomers yields I ($X = O$) and its biaryl diastereomer. Triflation of the naphthol of the chlorophthalazinylnaphthol intermediate, substitution of the pyridazinyl chloride with (R)-1-phenylethylamine, nickel-catalyzed coupling of the aryl triflate with diphenylphosphine, and separation of the diastereomers yields I ($X = NH$) and its biaryl diastereomer. The diastereomers of I ($X = O, NH$) are separable either by crystallization or by column chromatog. (depending on scale); separation of the enantiomers of II requires separation of diastereomeric palladium complexes, which limits the functionalization and availability of the ligand. Hydroboration of substituted styrenes with freshly distilled catecholborane in the presence of a preformed rhodium catalyst derived from I ($X = O$) and $[Rh(1,5-COD)2]+BF_4^-$ followed by oxidation yields nonracemic 1-arylethanols in 73–94% yields, in 84–92% ee, and with regioselectivities of 91:9–98:2 (favoring the secondary alcs.); the enantioselectivities are similar to those found when II is used as the ligand. N-(ethoxycarbonylmethyl) arylaldimines undergo dipolar cycloaddn. with tert-Bu acrylate in the presence of I ($X = O$), silver (I) acetate, and Hunig's base to yield arylpyrrolidinecarboxylates III ($R = MeO, CN$) in 88–94% yields and in 92–95% ee; the use of II in the reactions gives products in 95–96% ee. Alkynes R1C.tplbond.CH ($R1 = Me3Si, Ph, Bu$) undergo addition to iminium ions generated from aldehydes R2CHO ($R2 = Me2CH, Me2CHCH2$) and dibenzylamine in

the presence of copper (I) bromide and either I ($X = \text{NH}$) or its axial diastereomer to yield either enantiomer of the nonracemic propargylamines $\text{R}_2\text{CH}(\text{NBn}_2)\text{C.tplbond.CRI}$ in 72-88% yields and in 90-99% ee; the use of II in the addition yields products in 82-92% ee. The crystal structures of I ($X = \text{O, NH}$) are determined by X-ray crystallog.

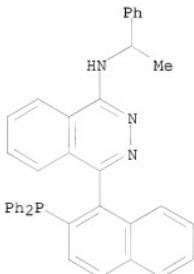
IT 828927-96-4P

RL: CAT (Catalyst use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(crystal structure; preparation of nonracemic phthalazinylnaphthyl diphenylphosphines as readily available P,N-ligands for asym. synthesis and their use in enantioselective hydroboration, azomethine cycloaddn., and addition reactions)

RN 828927-96-4 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (1S)- (CA INDEX NAME)



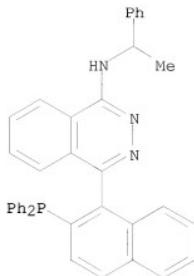
IT 828927-97-5P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(preparation of nonracemic phthalazinylnaphthyl diphenylphosphines as readily available P,N-ligands for asym. synthesis and their use in enantioselective hydroboration, azomethine cycloaddn., and addition reactions)

RN 828927-97-5 CAPLUS

CN 1-Phthalazinamine, 4-[2-(diphenylphosphino)-1-naphthalenyl]-N-[(1R)-1-phenylethyl]-, (1R)- (CA INDEX NAME)



IT 828300-90-9P

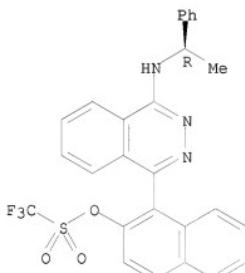
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of nonracemic phthalazinylnaphthyl diphenylphosphines as readily available P,N-ligands for asym. synthesis and their use in enantioselective hydroboration, azomethine cycloaddn., and addition reactions)

RN 828300-90-9 CAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-,
1-[4-[(1R)-1-phenylethyl]amino]-1-phthalazinyl]-2-naphthalenyl ester (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 35 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:913166 CAPLUS

DOCUMENT NUMBER: 142:16408

TITLE: Cyclic nucleotides and neuroblastoma differentiation

AUTHOR(S): Messina, E.; Lupi, F.; Barile, L.; Giacomello, A.

CORPORATE SOURCE: Department of Experimental Medicine and Pathology, "La Sapienza" University, Rome, Italy

SOURCE: Nucleosides, Nucleotides & Nucleic Acids (2004), 23(8)

& 9), 1551-1554

CODEN: NNNAFY; ISSN: 1525-7770

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors have shown that intracellular cGMP levels increase during retinoic acid- and mycophenolic acid-induced neuroblastoma differentiation and that a 6 days treatment with 1 mM dbcGMP lead LAN5 cell to elaborate a network of neuritic processes suggesting an involvement of cGMP in neuroblastoma differentiation. The authors have also investigated the effects of some specific inhibitors of phosphodiesterases (PDE1, PDE3, PDE4, and PDE5) on human neuroblastoma (LAN5 and SHEP) growth and differentiation. After six days of incubation in the presence of each specific inhibitor at 10 + IC₅₀ levels a cytostatic and differentiating effect was only observed with the PDE5 inhibitors Zaprinast and MY-5445. The cytostatic effect of these compds. increased increasing their concns. far above their IC₅₀ levels for PDE5, suggesting that these compds. could act by interfering with other mol. events than direct cGMP-PDE inhibition. No appreciable effect was observed using Dipyridamole, another specific PDE5 inhibitor.

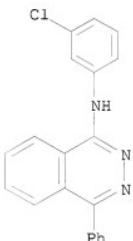
IT 78351-75-4, MY-5445

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(cyclic nucleotides and neuroblastoma differentiation)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 36 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:902192 CAPLUS

DOCUMENT NUMBER: 141:374750

TITLE: Bone growth stimulation compositions comprising nitric oxide generating system statin-like compounds and phosphodiesterase inhibitor

INVENTOR(S): Garrett, I. Ross; Mundy, Gregory R.; Gutierrez, Gloria
PATENT ASSIGNEE(S): Osteoscreen, Inc., USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2004091626 | A1 | 20041028 | WO 2004-US10971 | 20040407 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 20040254238 | A1 | 20041216 | US 2004-820565 | 20040407 |
| PRIORITY APPLN. INFO.: | | | US 2003-461317P | P 20030407 |
| | | | US 2003-504095P | P 20030919 |
| | | | US 2003-513771P | P 20031022 |

OTHER SOURCE(S): MARPAT 141:374750

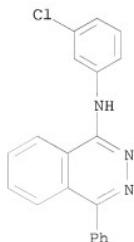
AB The present invention provides methods to enhance bone formation in a vertebrate subject comprising administering to a vertebrate subject in need of such enhancement an effective amount of any two of the following components: nitric oxide (NO) generating system; statin-like compound; and phosphodiesterase (PDE) inhibitor. Also disclosed is a pharmaceutical composition comprising said at least two components. The methods and compns. are thus useful in treating osteoporosis, bone fracture or deficiency, primary or secondary hyperparathyroidism, periodontal disease or defect, metastatic bone disease, osteolytic bone disease, post-plastic surgery, post-prosthetic joint surgery, and post-dental implantation.

IT 78351-75-4, MY-5445

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bone growth stimulation compns. comprising nitric oxide generating system statin-like compds. and phosphodiesterase inhibitor)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 37 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:872710 CAPLUS

DOCUMENT NUMBER: 141:343540

TITLE: Specific NAD(P)H oxidase inhibitor

INVENTOR(S): Yamamoto, Toshihiro; Yamada, Kumi

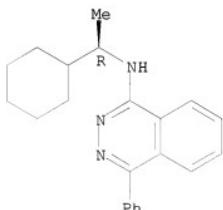
PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan

SOURCE: PCT Int. Appl., 40 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2004089412 | A1 | 20041021 | WO 2004-JP5065 | 20040408 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1616576 | A1 | 20060118 | EP 2004-726653 | 20040408 |
| R: AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| US 20070082910 | A1 | 20070412 | US 2006-552340 | 20061212 |
| PRIORITY APPLN. INFO.: | | | JP 2003-103576 | A 20030408 |
| | | | WO 2004-JP5065 | W 20040408 |

OTHER SOURCE(S): MARPAT 141:343540
 AB An inhibitor for the hyperfunction of NAD(P)H oxidase containing a compound which substantially does not inhibit NADPH oxidase originating in leukocytes but inhibits NAD(P)H oxidase originating in tissues other than leukocytes, and a medicinal composition containing the same.
 IT 149549-14-4 774233-42-0
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (bicyclic pyridazine analogs as tissue specific NAD(P)H oxidase inhibitors for treatment of diseases)
 RN 149549-14-4 CAPLUS
 CN 1-Pthalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

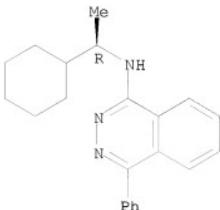


RN 774233-42-0 CAPLUS
 CN 1-Pthalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl-,
 (2Z)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 149549-14-4
CMF C22 H25 N3

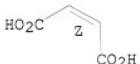
Absolute stereochemistry.



CM 2

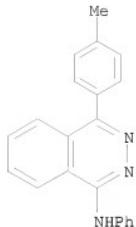
CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 38 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:205961 CAPLUS
DOCUMENT NUMBER: 142:197900
TITLE: Product class 10: phthalazines
AUTHOR(S): Haider, N.; Holzer, W.
CORPORATE SOURCE: Germany
SOURCE: Science of Synthesis (2004), 16, 315-372
CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. Preparation is given for phthalazines via ring closure or transformation reactions, aromatization or substituent modification.
IT 76972-84-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of phthalazines)
RN 76972-84-4 CAPLUS
CN 1-Phthalazinamine, 4-(4-methylphenyl)-N-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 384 THERE ARE 384 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 39 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:570639 CAPLUS
 DOCUMENT NUMBER: 139:106501
 TITLE: Method for treating erectile dysfunction and increasing libido in men using a transdermal hydroalcoholic testosterone gel
 INVENTOR(S): Dudley, Robert E.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S. Ser. No. 703,753.
 CODEN: USXKCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|--|----------|------------------|----------|
| US 20030139384 | A1 | 20030724 | US 2002-273484 | 20020108 |
| US 6503894 | B1 | 20030107 | US 2000-651777 | 20000830 |
| CA 2497686 | A1 | 20020307 | CA 2001-2497686 | 20010829 |
| CA 2498267 | A1 | 20020307 | CA 2001-2498267 | 20010829 |
| CN 101077350 | A | 20071128 | CN 2007-10109274 | 20010829 |
| CN 101081203 | A | 20071205 | CN 2006-10006628 | 20010829 |
| CA 2502607 | A1 | 20040506 | CA 2003-2502607 | 20031016 |
| WO 2004037173 | A2 | 20040506 | WO 2003-US32597 | 20031016 |
| WO 2004037173 | A3 | 20040729 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KE, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003277388 | A1 | 20040513 | AU 2003-277388 | 20031016 |
| EP 1551416 | A2 | 20050713 | EP 2003-809561 | 20031016 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2006505587 | T | 20060216 | JP 2004-546863 | 20031016 |

| | | | | |
|------------------------|----|----------|-----------------|-------------|
| US 20050054623 | A1 | 20050310 | US 2004-787071 | 20040225 |
| US 20050113353 | A1 | 20050526 | US 2004-825540 | 20040415 |
| US 20050112181 | A1 | 20050526 | US 2004-828678 | 20040420 |
| US 20050049233 | A1 | 20050303 | US 2004-867435 | 20040614 |
| US 20050142173 | A1 | 20050630 | US 2004-867445 | 20040614 |
| US 20050152956 | A1 | 20050714 | US 2004-925421 | 20040824 |
| MX 2005004093 | A | 20050722 | MX 2005-4093 | 20050415 |
| US 20060211664 | A1 | 20060921 | US 2005-531526 | 20050415 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2000-651777 | A2 20000830 |
| | | | US 2000-703753 | A2 20001101 |
| | | | US 2001-292398P | P 20010521 |
| | | | CA 2001-2419573 | A3 20010829 |
| | | | CA 2001-2420895 | A3 20010829 |
| | | | CN 2001-816433 | A3 20010829 |
| | | | CN 2001-817165 | A3 20010829 |
| | | | US 2001-33101 | B1 20011019 |
| | | | US 2001-46454 | B1 20011019 |
| | | | US 2002-153468 | A1 20020521 |
| | | | US 2002-273484 | A 20021018 |
| | | | US 2003-248267 | B1 20030103 |
| | | | WO 2003-US32597 | W 20030106 |

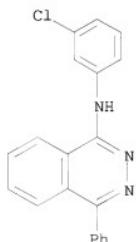
AB The present invention relates to a transdermal hydroalcoholic testosterone gel formulation that overcomes the problems associated with other testosterone delivery mechanisms by providing, among other things, a desirable pharmacokinetic hormone profile with little or no skin irritation. The gel comprises one or more lower alcs., such as ethanol or isopropanol; a penetration enhancing agent; a thickener; and water. In addition, the gel is used in conjunction with pharmaceuticals aimed at treating erectile dysfunction, such as VIAGRA, to enhance their effectiveness.

IT 78351-75-4, MY5445 78351-75-4D, MY5445, isomers and salts

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (method for treating erectile dysfunction and increasing libido in men using a transdermal hydroalcoholic testosterone gel and a phosphodiesterase inhibitor)

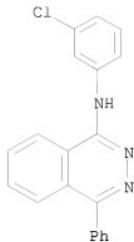
RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)

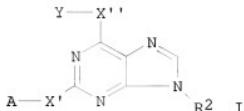


L6 ANSWER 40 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:301049 CAPLUS
 DOCUMENT NUMBER: 138:321058
 TITLE: C2-, C6- and 9-Aryl-substituted purine and other heteroaryl kinase inhibitor scaffolds and methods for their preparation
 INVENTOR(S): Ding, Sheng; Ding, Qiang; Gray, Nathanael S.
 PATENT ASSIGNEE(S): IRM LLC, Bermuda; The Scripps Research Institute
 SOURCE: PCT Int. Appl., 68 pp., which which which
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2003031406 | A2 | 20030417 | WO 2002-US32680 | 20021012 |
| WO 2003031406 | A3 | 20060105 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2463563 | A1 | 20030417 | CA 2002-2463563 | 20021012 |
| AU 2002342051 | A1 | 20030422 | AU 2002-342051 | 20021012 |
| US 20030191312 | A1 | 20031009 | US 2002-270030 | 20021012 |
| US 7176312 | B2 | 20070213 | | |
| JP 2005512972 | T | 20050512 | JP 2003-534390 | 20021012 |
| EP 1578722 | A2 | 20050928 | EP 2002-776216 | 20021012 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| US 20060009642 | A1 | 20060112 | US 2005-223429 | 20050909 |
| US 20070191380 | A1 | 20070816 | US 2007-673976 | 20070212 |
| PRIORITY APPLN. INFO.: | | | US 2001-328763P | P 20011012 |
| | | | US 2001-331835P | P 20011120 |
| | | | US 2002-346480P | P 20020107 |
| | | | US 2002-348089P | P 20020110 |
| | | | US 2001-328741P | P 20011012 |

| | |
|-----------------|-------------|
| US 2002-346552P | P 20020107 |
| US 2002-347037P | P 20020108 |
| US 2002-170031 | A3 20020612 |
| US 2002-270030 | A3 20021012 |
| WO 2002-US32680 | W 20021012 |

OTHER SOURCE(S): CASREACT 138:321058; MARPAT 138:321058
GI



AB General methods for the solution phase as well as solid phase synthesis of various substituted heteroaryls, particularly C2-, C6- and 9-aryl-substituted purines (e.g. 2-(2,4-dimethoxyphenyl)-6-(4-methoxybenzylamino)-9-isopropylpurine), was demonstrated. These substituted heteroaryls can be further elaborated by aromatic substitution with amines at elevated temperature or by anilines, boronic acids and phenols via Pd catalyzed cross-coupling reactions. The 1st claim comprises a method of preparing a C2-substituted purine compound, said method comprising: reacting a C2-halogenated purine with A-X (X = -B(OH)2, -OH, and -NHR1; R1 = H, (un)substituted alkyl; A = (un)substituted alkyl, (un)substituted aryl, (un)substituted heterocyclyl) in the presence of a solvent, a base, a carbene ligand and a Pd catalyst. The 2nd claims narrows the 1st claim to purines I wherein R2 = H, (un)substituted alkyl, (un)substituted aryl, (un)substituted heterocyclyl; X' = direct bond, NR1 and O; X'' = direct bond, O and NR3, with the proviso that when X'' is NR3, Y is R4 or A', and when X' is O or direct bond, Y is A'; A' = (un)substituted alkyl, (un)substituted aryl, (un)substituted arylalkyl, (un)substituted heterocyclyl; R3 = H, (un)substituted alkyl; and R4 = (un)substituted alkyl. Similar claims pertain to C6-substituted purines. Also claimed is a method of preparing a 9-aryl substituted purines, the method comprising: reacting a 2,6-dihalogenated purine with Ar-B(OH)2 (Ar = (un)substituted aryl, and (un)substituted heterocyclyl) in the presence of a solvent and a Cu catalyst. Also claimed is a method for synthesizing a substituted heteroaryl, the method comprising: providing a dihaloheteroaryl scaffold moiety and capturing the dihaloheteroaryl scaffold moiety on a resin by nucleophilic substitution of a 1st halogen by a resin-bound amine nucleophile to afford a resin-bound amine substituted monohalo(hetero)aryl. Substitution of the 2nd halogen is done by nucleophilic displacement (e.g. by aniline, phenol, amine, boronic acid) or coupling (e.g. palladium-mediated). An initial substitution (e.g. alkylation, acylation, coupling) can be done prior to substitution of the 1st halogen. Example procedures are included for: boronic acid coupling, aniline coupling, phenol coupling, purine N9 arylation via boronic acids/cupric acetate, reductive amination for synthesis of PAL-resin-bound amine, resin capture of dichloroheterocycles, substitution of remaining chloro group with boronic acids via Suzuki coupling and product cleavage, substitution of remaining chloro group with anilines or amines via palladium-catalyzed reaction and product cleavage, substitution of remaining chloro group with phenols via palladium-catalyzed reaction and product cleavage, substitution of remaining chloro group with amines via non-palladium-catalyzed amination reaction without base and product cleavage, and substitution of remaining chloro group with amines via non-palladium-catalyzed amination reaction with KOtBu as base and product cleavage. Tables of purity and yields for various heteroaryl

combinatorial libraries are included as validation of the following methods: palladium catalyzed cross-coupling reactions for derivatizing resin-bound 2-chloro-6-aminopurine with boronic acids, anilines, amines and phenols, resin-bound chloroheterocyclic scaffolds which can be derivatized via Suzuki coupling reaction, resin-bound chloroheterocyclic scaffolds which can be derivatized via palladium catalyzed amination reaction, and resin-bound chloroheterocyclic scaffolds which can be derivatized via palladium catalyzed C-O bond formation reaction.

IT 406932-53-4P, 1-(4-Methoxybenzylamino)-4-(3-

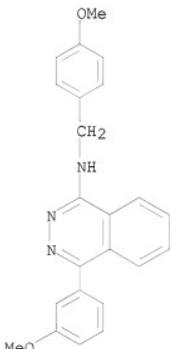
methoxyphenyl)phthalazine

RL: CPN (Combinatorial preparation); CMPI (Combinatorial study); PREP (Preparation)

(C2-, C6- and 9-Aryl-substituted purine and other heteroaryl kinase inhibitor scaffolds and methods for their preparation)

RN 406932-53-4 CAPLUS

CN 1-Phthalazinamine, 4-(3-methoxyphenyl)-N-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 41 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:117670 CAPLUS

DOCUMENT NUMBER: 138:147725

TITLE: Novel method and device for treatment of exercise-induced pulmonary hemorrhage in horses

INVENTOR(S): Bratton, Calvert R.; Tobin, Thomas

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2003011344 | A1 | 20030213 | WO 2002-US24588 | 20020801 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR,
NE, SN, TD, TG

AU 2002330522 A1 20030217 AU 2002-330522 20020801
US 20040053938 A1 20040318 US 2003-466803 20030716

PRIORITY APPLN. INFO.: US 2001-309389P P 20010801
WO 2002-US24588 W 20020801

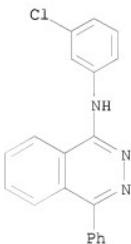
AB A device and method are provided for convenient, patient compliant inhalation therapy of equine species. The device can be used to deliver any drug or other pharmaceutical agent which can be adapted for inhalation directly into the nasal passages of a horse and thereby provide inhalation therapy with minimal discomfort. The device can be used to treat any of a number of conditions including, EIPH, infections and allergies, e.g., asthma or heaves. In one embodiment, the invention provides a method for the treatment or prevention of EIPH, utilizing a composition adapted for inhalant therapy comprised of sildenafil citrate alone or in combination other agents.

IT 78351-75-4, MY5445

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel method and device for treatment of exercise-induced pulmonary hemorrhage in horses)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 42 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:1227 CAPLUS

DOCUMENT NUMBER: 138:66667

TITLE: Methods for identifying compounds for inhibiting of neoplastic lesions, and pharmaceutical compositions containing such compounds

INVENTOR(S): Pamukcu, Rifat; Piazza, Gary A.

PATENT ASSIGNEE(S): Cell Pathways, Inc., USA

SOURCE: U.S., 53 pp., Cont.-in-part of U. S. Ser. No. 46,739.

CODEN: USXAM

DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

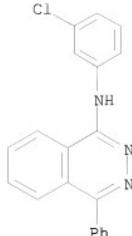
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|-------------|
| US 6500610 | B1 | 20021231 | US 1999-414625 | 19991008 |
| US 5858694 | A | 19990112 | US 1997-866027 | 19970530 |
| CA 2238283 | A1 | 19981130 | CA 1998-2238283 | 19980529 |
| CA 2238283 | C | 20020820 | | |
| TW 591111 | B | 20040611 | TW 1998-87108072 | 19980525 |
| CZ 295868 | B6 | 20051116 | CZ 1998-1651 | 19980528 |
| NO 9802477 | A | 19981201 | NO 1998-2477 | 19980529 |
| NO 321717 | B1 | 20060626 | | |
| AU 9869794 | A | 19981210 | AU 1998-69794 | 19980529 |
| AU 709666 | B2 | 19990902 | | |
| JP 11094823 | A | 19990409 | JP 1998-150033 | 19980529 |
| JP 3053381 | B2 | 20000619 | | |
| ZA 9804646 | A | 19991129 | ZA 1998-4646 | 19980529 |
| JP 2000198746 | A | 20000718 | JP 2000-44184 | 19980529 |
| AT 198771 | T | 20010215 | AT 1998-304247 | 19980529 |
| ES 2132055 | T3 | 20010501 | ES 1998-304247 | 19980529 |
| IL 124699 | A | 20030212 | IL 1998-124699 | 19980529 |
| CN 1224761 | A | 19990804 | CN 1998-102044 | 19980601 |
| CN 1222110 | C | 20030924 | | |
| HK 1012196 | A1 | 20010412 | HK 1998-113546 | 19981216 |
| US 6156528 | A | 20001205 | US 1998-216070 | 19981219 |
| JP 2000028601 | A | 20000128 | JP 1999-189615 | 19990702 |
| JP 3234818 | B2 | 20011204 | | |
| US 20030004093 | A1 | 20030102 | US 2002-40776 | 20020107 |
| US 20030064421 | A1 | 20030403 | US 2002-253849 | 20020924 |
| US 20030190686 | A1 | 20031009 | US 2002-252983 | 20020924 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1997-866027 | A2 19970530 |
| | | | US 1998-46739 | A2 19980324 |
| | | | JP 1998-150033 | A3 19980529 |
| | | | US 1998-216070 | A2 19981219 |

US 1999-414625 A1 19991008
US 2000-602980 B1 20000623
US 2000-664035 B1 20000918

AB The invention provides pharmaceutical compns. containing compds. for the treatment of neoplasia in mammals. The phosphodiesterase inhibitory activity of a compound is determined along with cyclooxygenase inhibitory activity. Growth inhibitory and apoptosis inducing effects on cultured tumor cells are also determined. Compds. that exhibit phosphodiesterase inhibition, growth inhibition and apoptosis induction, but preferably not substantial prostaglandin inhibitory activity, are desirable for the treatment of neoplasia.

IT 78351-75-4, MY5445
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

RN 78351-75-4 CAPLUS (Biological study); USES (Uses) (antitumor agent identification methods, and pharmaceutical compns.)



REFERENCE COUNT: 263 THERE ARE 263 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L6 ANSWER 43 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:241329 CAPLUS
 DOCUMENT NUMBER: 1361284433
 TITLE: Administration of phosphodiesterase inhibitors for the treatment of premature ejaculation
 INVENTOR(S): Wilson, Leland F.; Doherty, Paul C.; Place, Virgil A.; Smith, William L.; Abdel-Hamid, Abdou Ali Ibrahim Aboubakr
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 467,094.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|--|----------|-----------------|----------|
| US 20020037828 | A1 | 20020328 | US 2001-888250 | 20010621 |
| US 6403597 | B2 | 20020611 | | |
| US 6037346 | A | 20000314 | US 1998-181070 | 19981027 |
| US 6548490 | B1 | 20030415 | US 1999-467094 | 19991210 |
| CA 2451152 | A1 | 20030103 | CA 2002-2451152 | 20020325 |
| WO 2003000343 | A2 | 20030103 | WO 2002-US9415 | 20020325 |
| WO 2003000343 | A3 | 20040325 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2002248712 | A1 | 20030108 | AU 2002-248712 | 20020325 |
| EP 1418896 | A2 | 20040519 | EP 2002-717729 | 20020325 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2005519851 | T | 20050707 | JP 2003-506984 | 20020325 |

| | | | | |
|------------------------|----|----------|----------------|-------------|
| AU 2005248938 | A1 | 20060202 | AU 2005-248938 | 20051223 |
| PRIORITY APPLN. INFO.: | | | US 1997-958816 | B2 19971028 |
| | | | US 1998-181070 | A2 19981027 |
| | | | US 1999-467094 | A2 19991210 |
| | | | AU 2001-22566 | A3 20001208 |
| | | | US 2001-888250 | A 20010621 |
| | | | WO 2002-US9415 | W 20020325 |

AB A method is provided for treatment of premature ejaculation by administration of a phosphodiesterase inhibitor, e.g., an inhibitor of a Type III, Type IV, or Type V phosphodiesterase. In a preferred embodiment, administration is on as "as needed" basis, i.e., the drug is administered immediately or several hours prior to sexual activity. Pharmaceutical formulations and packaged kits are also provided.

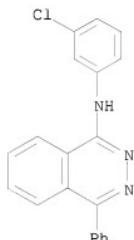
Zaprinast 1.0, mannitol 1.0, microcryst. cellulose 2.0, and magnesium stearate 10 mg are blended in a suitable mixer and then compressed into sublingual tablets. Each sublingual tablet contains 10 mg zaprinast.

IT 78351-75-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(administration of phosphodiesterase inhibitors for treatment of premature ejaculation)

RN 78351-75-4 CAPLUS

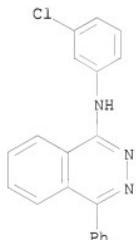
CN 1-Phtalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 44 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:220372 CAPLUS
DOCUMENT NUMBER: 136:241706
TITLE: Use of phosphodiesterase inhibitors for the treatment of anorectal disorders
INVENTOR(S): Jones, Oliver; Brading, Alison Frances; Mortensen, Neil James McCready
PATENT ASSIGNEE(S): Isis Innovation Limited, UK
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXDZ
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

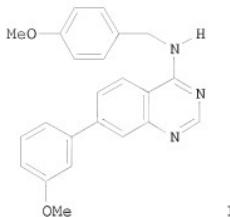
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2002022127 | A1 | 20020321 | WO 2000-GB3510 | 20000913 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, | | | | |

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 2000070300 A 20020326 AU 2000-70300 20000913
 PRIORITY APPLN. INFO.: WO 2000-GB3510 A 20000913
 AB The invention relates to a method for the treatment of an anorectal
 condition in a mammal, the method comprising administering to a subject in
 need of such treatment an effective amount of a phosphodiesterase inhibitor,
 and pharmaceutical preps. for use in this method.
 IT 78351-75-4
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (phosphodiesterase inhibitors for treatment of anorectal disorders)
 RN 78351-75-4 CAPLUS
 CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 45 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:96165 CAPLUS
 DOCUMENT NUMBER: 136:294745
 TITLE: A combinatorial scaffold approach toward
 kinase-directed heterocycle libraries
 AUTHOR(S): Ding, Sheng; Gray, Nathanael S.; Wu, Xu; Ding, Qiang;
 Schultz, Peter G.
 CORPORATE SOURCE: Department of Chemistry and the Skaggs Institute for
 Chemical Biology, The Scripps Research Institute, La
 Jolla, CA, 92037, USA
 SOURCE: Journal of the American Chemical Society (2002),
 124(8), 1594-1596
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: CODEN: JACSAT; ISSN: 0002-7863
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 136:294745
 GI



AB A novel strategy for efficient synthesis of various substituted nitrogen-heterocycles, e.g., I, as kinase-directed combinatorial libraries is described. The general scheme involves capture of various dichloroheterocycles onto solid support and further elaborations by aromatic substitution with amines at elevated temperature or by anilines, boronic acids, and phenols via palladium-catalyzed cross-coupling reactions, thus the scaffold itself is transformed into a diversity element within the combinatorial scheme. Libraries consisting of discrete and highly diverse heterocyclic small mols. constructed with these chemistries are currently being evaluated in a variety of cell and protein-based assays.

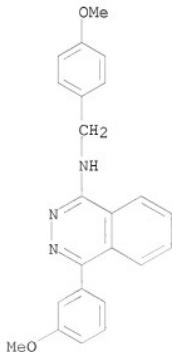
IT 406932-53-4P

RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)

(derivatization of resin-bound chloroheterocyclic scaffolds via Suzuki coupling reaction with aryl boronic acid and subsequent cleavage of substituted heterocyclic product)

RN 406932-53-4 CAPLUS

CN 1-Phtalazinamine, 4-(3-methoxyphenyl)-N-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)



REFERENCE COUNT:

15

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2001:780619 CAPLUS

DOCUMENT NUMBER: 135:339217

TITLE: Method for treating a patient with neoplasia by treatment with a topoisomerase I inhibitor and a cGMP-specific phosphodiesterase inhibitor

INVENTOR(S): Pamukcu, Rifat; Lobacki, Joseph

PATENT ASSIGNEE(S): Cell Pathways, Inc., USA

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2001078651 | A2 | 20011025 | WO 2001-US11865 | 20010412 |
| WO 2001078651 | A3 | 20020314 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001055322 | A | 20011030 | AU 2001-55322 | 20010412 |
| EP 1278519 | A2 | 20030129 | EP 2001-928470 | 20010412 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| PRIORITY APPLN. INFO.: | | | US 2000-548135 | A 20000412 |
| | | | WO 2001-US11865 | W 20010412 |

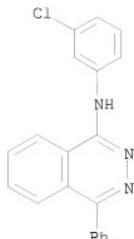
AB The invention provides a method for treating a patient with neoplasia by an adjuvant therapy that includes treatment with a topoisomerase I inhibitor and a cGMP-specific phosphodiesterase inhibitor. Isolation and characterization of phosphodiesterase activity from cancer cells is also described.

IT 78351-75-4, MY5445

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(topoisomerase I inhibitor and cGMP-specific phosphodiesterase inhibitor for neoplasia treatment)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 47 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:661250 CAPLUS
 DOCUMENT NUMBER: 135:221272
 TITLE: Method for treating a patient with neoplasia by treatment with a vinca alkaloid derivative
 INVENTOR(S): Pamukcu, Rifat; Lobacki, Joseph
 PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
 SOURCE: PCT Int. Appl., 93 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2001064210 | A1 | 20010907 | WO 2001-US5562 | 20010221 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

US 6555547 B1 20030429 US 2000-515714 20000228
 PRIORITY APPLN. INFO.: US 2000-515714 A 20000228

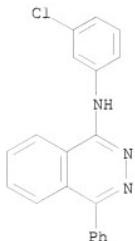
AB This invention provides a method for treating a patient with neoplasia by an adjuvant therapy that includes treatment with an antineoplastic vinca alkaloid derivative combined with a cyclic GMP-specific phosphodiesterase inhibitor. This invention also relates to packaged pharmaceutical compns. that are provided together with written materials describing the use of a cyclic GMP-specific phosphodiesterase inhibitor in combination with a vinca alkaloid derivative for the treatment of cancer and precancerous lesions.

IT 78351-75-4, MY5445

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method for treating a patient with neoplasia by treatment with a vinca alkaloid derivative in combination with a cGMP phosphodiesterase inhibitor

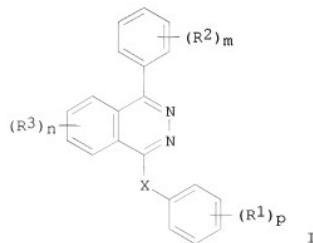
in relation to cyclooxygenase and protein kinase G and β -catenins)
RN 78351-75-4 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

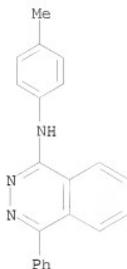
L6 ANSWER 48 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:224391 CAPLUS
DOCUMENT NUMBER: 134:252351
TITLE: Preparation of 4-arylphthalazines for treating precancerous lesions or neoplasms.
INVENTOR(S): Piazza, Gary; Pamukcu, Rifaat
PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
SOURCE: U.S., 14 pp., Cont. of U.S. Ser. No. 473,094, abandoned.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|-------------|
| US 6207666 | B1 | 20010327 | US 1998-65662 | 19980423 |
| PRIORITY APPLN. INFO.: | | | US 1995-473094 | B1 19950607 |
| OTHER SOURCE(S): | MARPAT | 134:252351 | | |

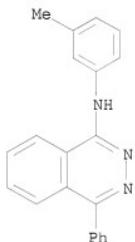


I

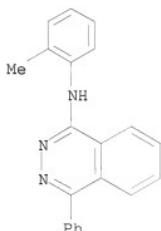
- AB A method of treating precancerous lesions comprises administration of title compds. (I; R1 = alkyl, alkoxy, halo, trihalomethyl; R2 = alkyl, alkoxy, halo; R3 = alkyl; m, n, p = 0-3). Thus, 1-chloro-4-phenylphthalazine, p-toluidine, and Cu powder were heated at 100° for 1 h to give 29% 1-(4-methylanilino)-4-phenylphthalazine. 1-(3-Chloroanilino)-4-phenylphthalazine at 10 μ M gave 100% inhibition of HT-29 colon carcinoma cell growth.
- IT 78351-61-8P 78351-62-9P 78351-63-0P
 78351-64-1P 78351-65-2P 78351-66-3P
 78351-67-4P 78351-68-5P 78351-69-6P
 78351-70-9P 78351-71-0P 78351-72-1P
 78351-73-2P 78351-74-3P 78351-75-4P
 78351-76-5P 78351-77-6P 78351-81-2P
 78351-82-3P 78351-83-4P 78351-84-5P
 78351-86-7P 78351-89-0P 78351-90-3P
 78351-91-4P 78351-92-5P 78351-95-8P
 78352-00-8P 78352-01-9P 78352-02-0P
 78352-03-1P 78352-04-2P 78352-05-3P
 78352-06-4P 78352-08-6P 78352-09-7P
 78352-10-0P 78352-11-1P 78352-12-2P
 78352-13-3P 78352-14-4P 78352-15-5P
 78352-16-6P 78352-17-7P 78352-18-8P
 78352-19-9P 78352-20-2P 78352-21-3P
 78352-22-4P 78352-23-5P 78352-24-6P
 78352-25-7P 78352-26-8P 78352-27-9P
 78352-29-1P 78352-30-4P 78352-31-5P
 78352-32-6P 78352-33-7P 78352-34-8P
 78352-35-9P 78352-36-0P 78352-37-1P
 78352-38-2P 78352-39-3P 78352-40-6P
 78352-41-7P 78352-42-8P 78352-43-9P
 78352-44-0P 78352-45-1P 78352-46-2P
 78352-47-3P 78352-48-4P 78352-49-5P
 78352-50-8P 78352-51-9P 78352-52-0P
 78352-53-1P 78352-54-2P 78352-55-3P
 78352-56-4P 78352-57-5P 78352-58-6P
 78352-59-7P 78352-60-0P 78352-61-1P
 78352-62-2P 78352-63-3P 78352-64-4P
 78352-65-5P 78352-66-6P 78352-67-7P
 78352-68-8P 78361-49-6P 78361-50-9P
 78361-51-0P 78361-52-1P 78933-58-1P
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of 4-arylphtalazines for treating precancerous lesions or neoplasms)
- RN 78351-61-8 CAPLUS
 CN 1-Phthalazinamine, N-(4-methylphenyl)-4-phenyl- (CA INDEX NAME)



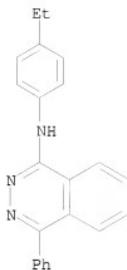
RN 78351-62-9 CAPLUS
CN 1-Phthalazinamine, N-(3-methylphenyl)-4-phenyl- (CA INDEX NAME)



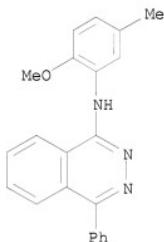
RN 78351-63-0 CAPLUS
CN 1-Phthalazinamine, N-(2-methylphenyl)-4-phenyl- (CA INDEX NAME)



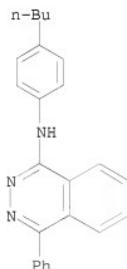
RN 78351-64-1 CAPLUS
CN 1-Phthalazinamine, N-(4-ethylphenyl)-4-phenyl- (CA INDEX NAME)



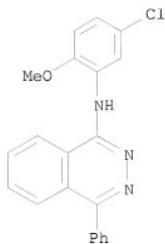
RN 78351-65-2 CAPLUS
CN 1-Phthalazinamine, N-(2-methoxy-5-methylphenyl)-4-phenyl- (CA INDEX NAME)



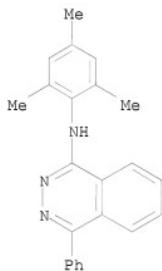
RN 78351-66-3 CAPLUS
CN 1-Phthalazinamine, N-(4-butylphenyl)-4-phenyl- (CA INDEX NAME)



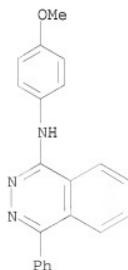
RN 78351-67-4 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



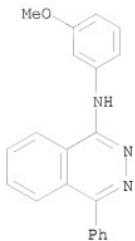
RN 78351-68-5 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



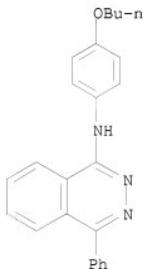
RN 78351-69-6 CAPLUS
CN 1-Phthalazinamine, N-(4-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



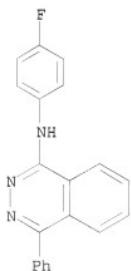
RN 78351-70-9 CAPLUS
CN 1-Phthalazinamine, N-(3-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



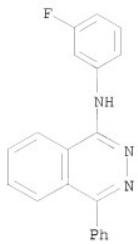
RN 78351-71-0 CAPLUS
CN 1-Phthalazinamine, N-(4-butoxyphenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-72-1 CAPLUS
CN 1-Phthalazinamine, N-(4-fluorophenyl)-4-phenyl- (CA INDEX NAME)

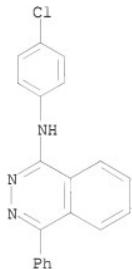


RN 78351-73-2 CAPLUS
CN 1-Phthalazinamine, N-(3-fluorophenyl)-4-phenyl- (CA INDEX NAME)



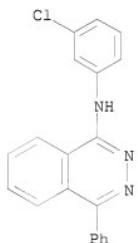
RN 78351-74-3 CAPLUS

CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-phenyl- (CA INDEX NAME)



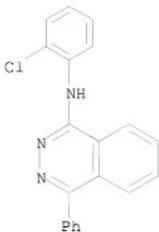
RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)

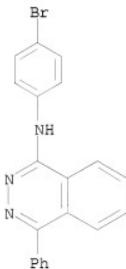


RN 78351-76-5 CAPLUS

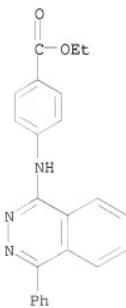
CN 1-Phthalazinamine, N-(2-chlorophenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-77-6 CAPLUS
CN 1-Phthalazinamine, N-(4-bromophenyl)-4-phenyl- (CA INDEX NAME)

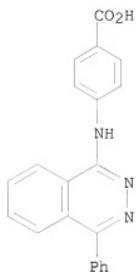


RN 78351-81-2 CAPLUS
CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]-, ethyl ester (CA INDEX NAME)



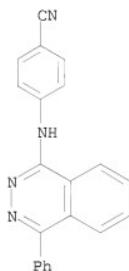
RN 78351-82-3 CAPLUS

CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)



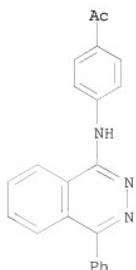
RN 78351-83-4 CAPLUS

CN Benzonitrile, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)

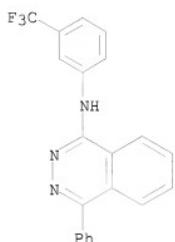


RN 78351-84-5 CAPLUS

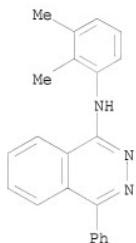
CN Ethanone, 1-[4-[(4-phenyl-1-phthalazinyl)amino]phenyl]- (CA INDEX NAME)



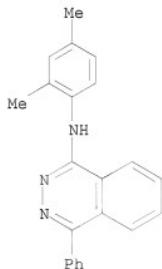
RN 78351-86-7 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 78351-89-0 CAPLUS
CN 1-Phthalazinamine, N-(2,3-dimethylphenyl)-4-phenyl- (CA INDEX NAME)

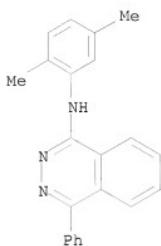


RN 78351-90-3 CAPLUS
CN 1-Phthalazinamine, N-(2,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



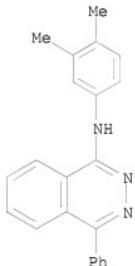
RN 78351-91-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



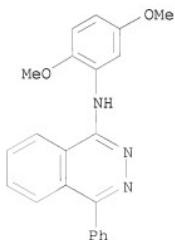
RN 78351-92-5 CAPLUS

CN 1-Phthalazinamine, N-(3,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



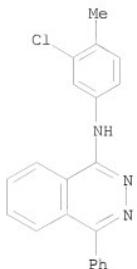
RN 78351-95-8 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-phenyl- (CA INDEX NAME)

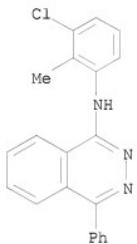


RN 78352-00-8 CAPLUS

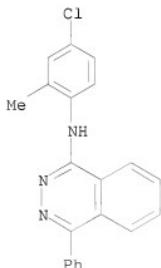
CN 1-Phthalazinamine, N-(3-chloro-4-methylphenyl)-4-phenyl- (CA INDEX NAME)



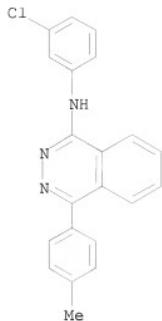
RN 78352-01-9 CAPLUS
CN 1-Phthalazinamine, N-(3-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)



RN 78352-02-0 CAPLUS
CN 1-Phthalazinamine, N-(4-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)

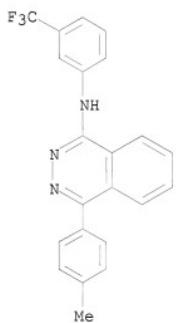


RN 78352-03-1 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



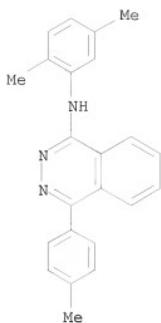
RN 78352-04-2 CAPLUS

CN 1-Phthalazinamine, 4-(4-methylphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

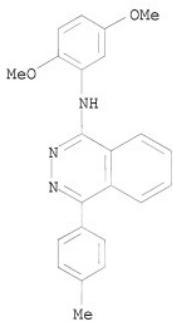


RN 78352-05-3 CAPLUS

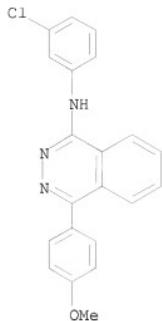
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



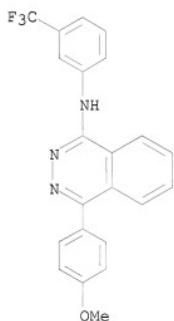
RN 78352-06-4 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



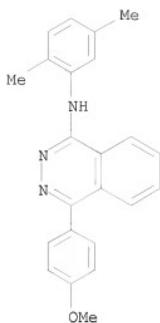
RN 78352-08-6 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



RN 78352-09-7 CAPLUS
CN 1-Phthalazinamine, 4-(4-methoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

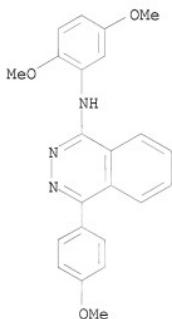


RN 78352-10-0 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



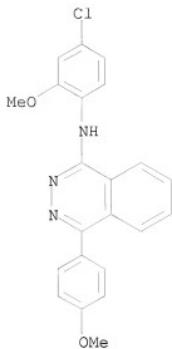
RN 78352-11-1 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



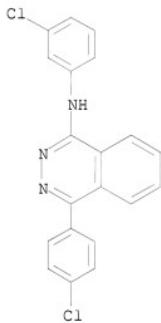
RN 78352-12-2 CAPLUS

CN 1-Phthalazinamine, N-(4-chloro-2-methoxyphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



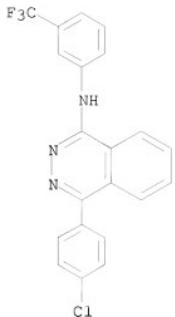
RN 78352-13-3 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-chlorophenyl)- (CA INDEX NAME)



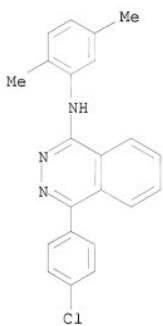
RN 78352-14-4 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



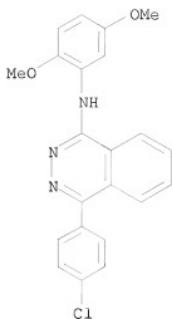
RN 78352-15-5 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



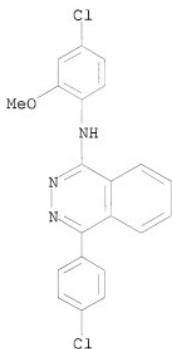
RN 78352-16-6 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



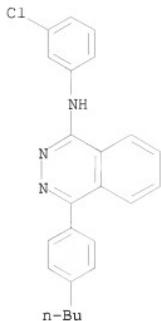
RN 78352-17-7 CAPLUS

CN 1-Phthalazinamine, N-(4-chloro-2-methoxyphenyl)-4-(4-chlorophenyl)- (CA INDEX NAME)

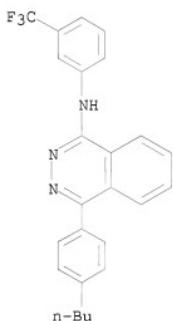


RN 78352-18-8 CAPLUS

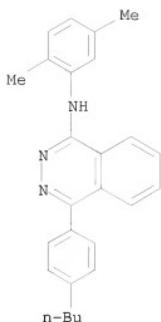
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(3-chlorophenyl)- (CA INDEX NAME)



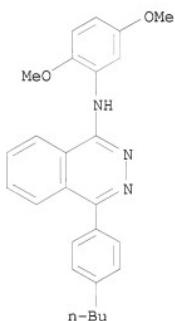
RN 78352-19-9 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



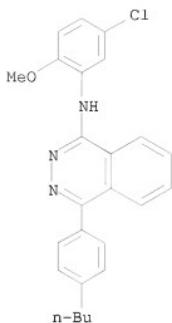
RN 78352-20-2 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



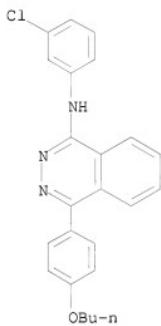
RN 78352-21-3 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



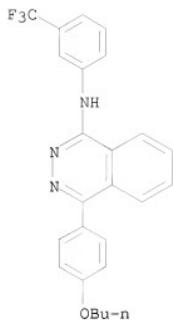
RN 78352-22-4 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(5-chloro-2-methoxyphenyl)- (CA INDEX NAME)



RN 78352-23-5 CAPLUS
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(3-chlorophenyl)- (CA INDEX NAME)

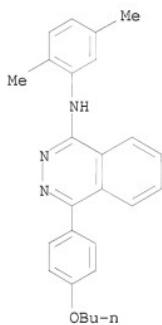


RN 78352-24-6 CAPLUS
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



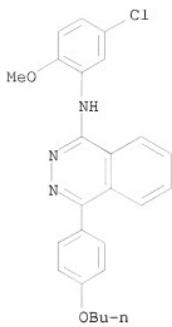
RN 78352-25-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)

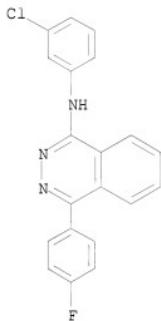


RN 78352-26-8 CAPLUS

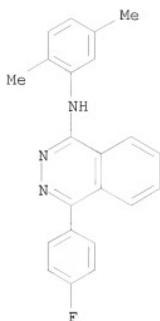
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(5-chloro-2-methoxyphenyl)- (CA INDEX NAME)



RN 78352-27-9 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)

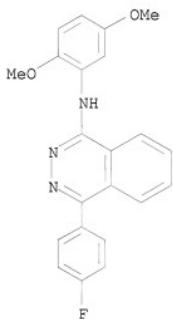


RN 78352-29-1 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



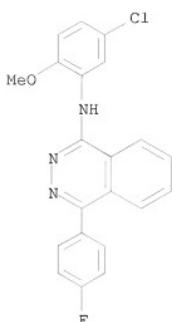
RN 78352-30-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



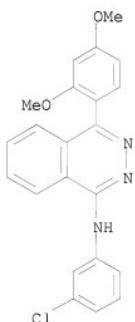
RN 78352-31-5 CAPLUS

CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



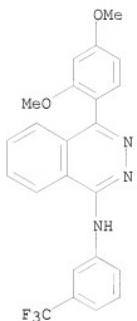
RN 78352-32-6 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(2,4-dimethoxyphenyl)- (CA INDEX NAME)

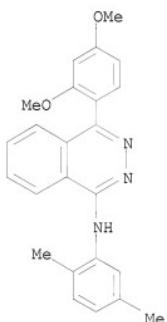


RN 78352-33-7 CAPLUS

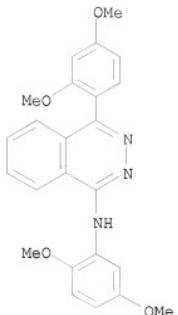
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 78352-34-8 CAPLUS
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2,5-dimethylphenyl)- (CA
INDEX NAME)

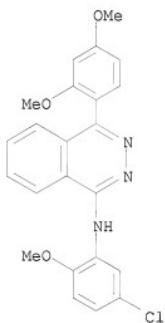


RN 78352-35-9 CAPLUS
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2,5-dimethoxyphenyl)- (CA
INDEX NAME)



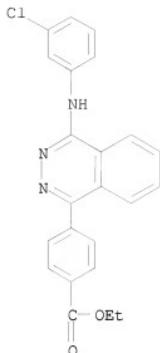
RN 78352-36-0 CAPLUS

CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(2,4-dimethoxyphenyl)-
(CA INDEX NAME)



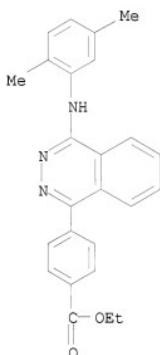
RN 78352-37-1 CAPLUS

CN Benzoic acid, 4-[(3-chlorophenyl)amino]-1-phthalazinyl-, ethyl ester
(CA INDEX NAME)



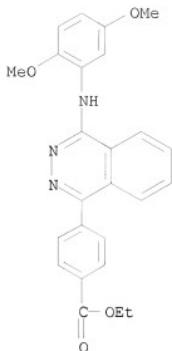
RN 78352-38-2 CAPLUS

CN Benzoic acid, 4-[4-[(2,5-dimethylphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



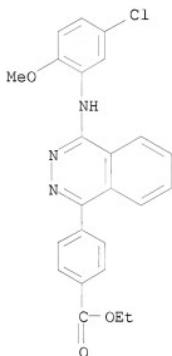
RN 78352-39-3 CAPLUS

CN Benzoic acid, 4-[4-[(2,5-dimethoxyphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



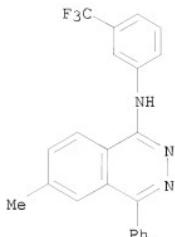
RN 78352-40-6 CAPLUS

CN Benzoic acid, 4-[4-[(5-chloro-2-methoxyphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)

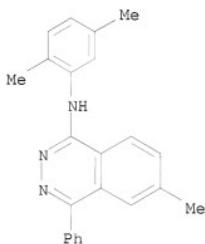


RN 78352-41-7 CAPLUS

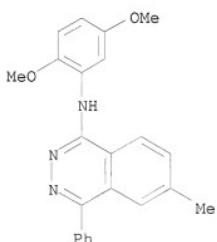
CN 1-Phthalazinamine, 6-methyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



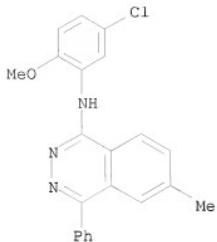
RN 78352-42-8 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



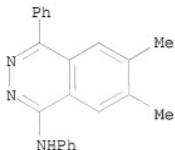
RN 78352-43-9 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



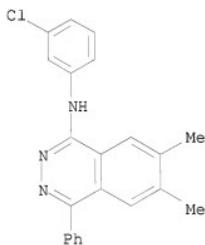
RN 78352-44-0 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



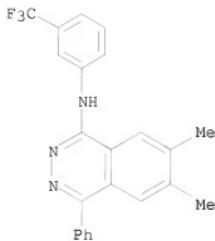
RN 78352-45-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethyl-N,4-diphenyl- (CA INDEX NAME)



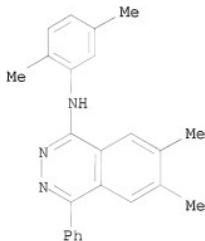
RN 78352-46-2 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



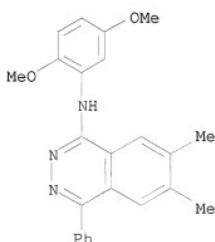
RN 78352-47-3 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



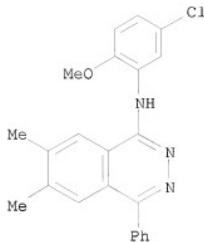
RN 78352-48-4 CAPLUS
 CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



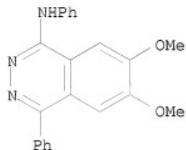
RN 78352-49-5 CAPLUS
 CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



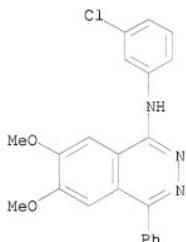
RN 78352-50-8 CAPLUS
 CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



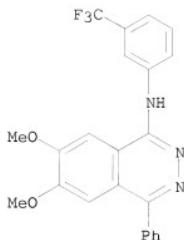
RN 78352-51-9 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethoxy-N,4-diphenyl- (CA INDEX NAME)



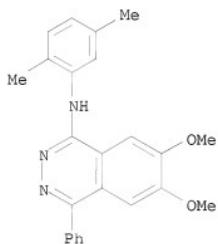
RN 78352-52-0 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



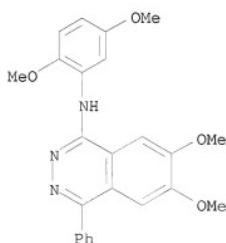
RN 78352-53-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethoxy-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



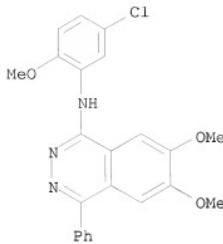
RN 78352-54-2 CAPLUS
 CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



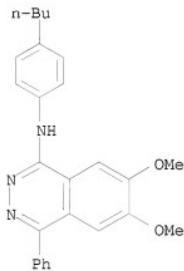
RN 78352-55-3 CAPLUS
 CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



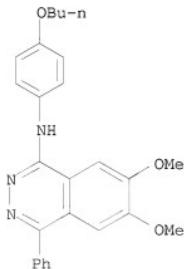
RN 78352-56-4 CAPLUS
 CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



RN 78352-57-5 CAPLUS
CN 1-Phthalazinamine, N-(4-butylphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX
NAME)

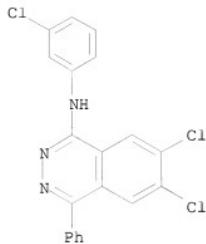


RN 78352-58-6 CAPLUS
CN 1-Phthalazinamine, N-(4-butoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX
NAME)

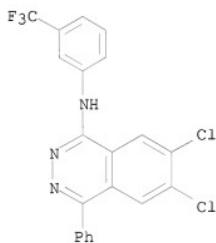


RN 78352-59-7 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-N-(3-chlorophenyl)-4-phenyl- (CA INDEX

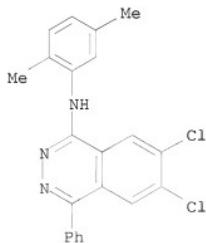
NAME)



RN 78352-60-0 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-4-phenyl-N-[3-(trifluoromethyl)phenyl]-
(CA INDEX NAME)

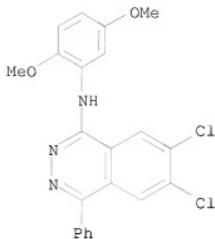


RN 78352-61-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-N-(2,5-dimethylphenyl)-4-phenyl-
(CA INDEX NAME)



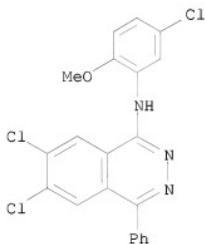
RN 78352-62-2 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-N-(2,5-dimethoxyphenyl)-4-phenyl-
(CA INDEX NAME)

INDEX NAME)



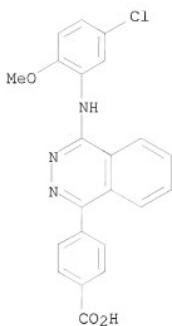
RN 78352-63-3 CAPLUS

CN 1-Phthalazinamine, 6,7-dichloro-N-(5-chloro-2-methoxyphenyl)-4-phenyl-
(CA INDEX NAME)

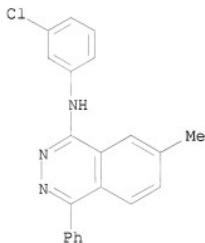


RN 78352-64-4 CAPLUS

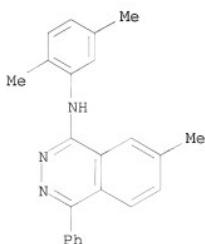
CN Benzoic acid, 4-[4-[(5-chloro-2-methoxyphenyl)amino]-1-phthalazinyl]-
(CA INDEX NAME)



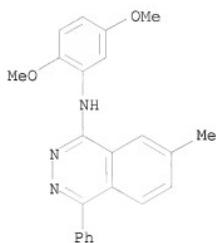
RN 78352-65-5 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



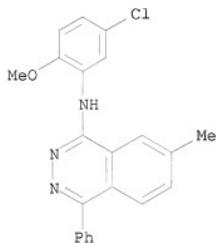
RN 78352-66-6 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



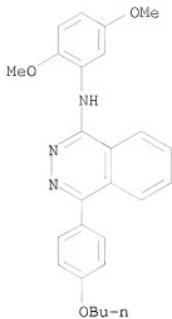
RN 78352-67-7 CAPLUS
CN 1-Phtalazinamine, N-(2,5-dimethoxyphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



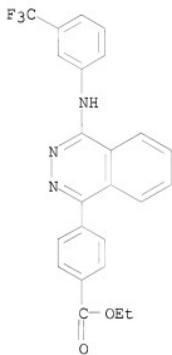
RN 78352-68-8 CAPLUS
CN 1-Phtalazinamine, N-(5-chloro-2-methoxyphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



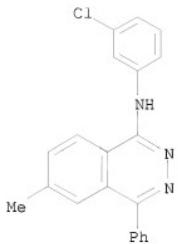
RN 78361-49-6 CAPLUS
CN 1-Phtalazinamine, 4-(4-butoxyphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



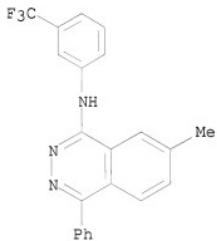
RN 78361-50-9 CAPLUS
CN Benzoic acid, 4-[4-[(3-(trifluoromethyl)phenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



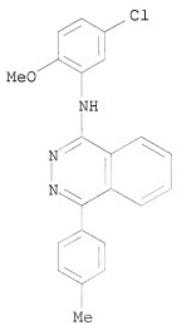
RN 78361-51-0 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



RN 78361-52-1 CAPLUS
CN 1-Phtalazinamine, 7-methyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 78933-58-1 CAPLUS
CN 1-Phtalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 49 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:28490 CAPLUS
DOCUMENT NUMBER: 134:95523
TITLE: Drugs for the increase of the cAMP levels
INVENTOR(S): Stief, Christian G.; Ueckert, Stefan; Becker, Armin;
Jonas, Udo; Forssmann, Wolf-Georg
Germany
PATENT ASSIGNEE(S): Ger. Offen., 6 pp.
SOURCE: CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|------------------|----------|
| DE 19931206 | A1 | 20010111 | DE 1999-19931206 | 19990707 |

PRIORITY APPLN. INFO.: DE 1999-19931206 19990707

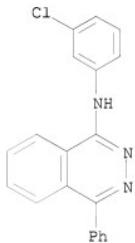
AB The invention concerns drugs for the increase of the cAMP levels and/or for the inhibition of the cAMP hydrolysis in smooth muscle tissues and their use for the treatment of diseases. Compds. such as sildenafil increased the cAMP levels in smooth muscle tissues.

IT 78351-75-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drugs for increase of cAMP levels)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)

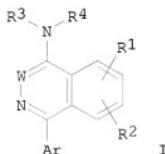


L6 ANSWER 50 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:622483 CAPLUS
DOCUMENT NUMBER: 133:207907
TITLE: Preparation of isoquinolinamines and phthalazinamines as corticotropin-releasing factor receptor CRF1 specific ligands
INVENTOR(S): Yuan, Jun; Yoon, Taeyoung
PATENT ASSIGNEE(S): Neurogen Corp., USA
SOURCE: U.S., 10 pp., Cont.-in-part of U. S. Ser. No. 768,987.
CODEN: USXAM
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 6114530 | A | 20000905 | US 1998-102310 | 19980622 |
| US 6353103 | B1 | 20020305 | US 2000-648200 | 20000825 |
| PRIORITY APPLN. INFO.: | | | US 1996-768987 | A2 19961218 |
| | | | US 1998-102310 | A3 19980622 |

OTHER SOURCE(S): MARPAT 133:207907
GI



AB The title compds. [I; Ar = (un)substituted Ph, naphthyl, pyridinyl, etc.; R1, R2 = H, alkyl, halo, etc.; R3, R4 = H, alkyl, OH, etc.; W = N, CH, C(alkyl)] which are highly selective partial agonists or antagonists at human CRF1 receptors that are useful in the diagnosis and treatment of treating stress related disorders such as post traumatic stress disorder (PTSD) as well as depression, headache and anxiety, were prepared E.g., a multi-step synthesis of I [Ar = 2,4,6-Me₃C₆H₂; R1, R2 = H; R3 = cyclopropylmethyl; R4 = Pr; W = CH] was given. The compds. I typically have IC₅₀ of 0.5 nM - 10 μM against CRF receptor binding.

IT 209416-23-9 209416-24-0 209416-25-1

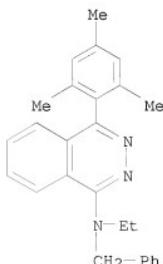
209416-26-2 209416-27-3

RL: PRPH (Prophetic)

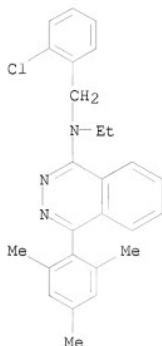
(Preparation of isoquinolinamines and phthalazinamines as corticotropin-releasing factor receptor CRF1 specific ligands)

RN 209416-23-9 CAPLUS

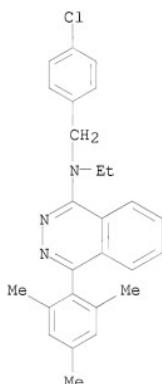
CN 1-Phthalazinamine, N-ethyl-N-(phenylmethyl)-4-(2,4,6-trimethylphenyl)-(CA INDEX NAME)



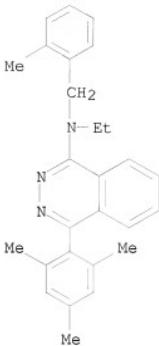
RN 209416-24-0 CAPLUS
CN 1-Phtalazinamine, N-[(2-chlorophenyl)methyl]-N-ethyl-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



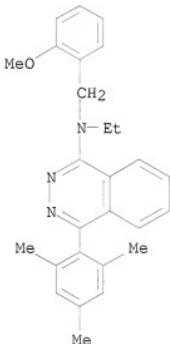
RN 209416-25-1 CAPLUS
CN 1-Phtalazinamine, N-[(4-chlorophenyl)methyl]-N-ethyl-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 209416-26-2 CAPLUS
CN 1-Phtalazinamine, N-ethyl-N-[(2-methylphenyl)methyl]-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



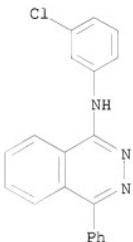
RN 209416-27-3 CAPLUS
CN 1-Phthalazinamine, N-ethyl-N-[(2-methoxyphenyl)methyl]-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 51 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:494195 CAPLUS
DOCUMENT NUMBER: 133:159684
TITLE: Exisulind induction of apoptosis involves guanosine 3',5'-cyclic monophosphate phosphodiesterase inhibition, protein kinase G activation, and attenuated β -catenin
AUTHOR(S): Thompson, W. Joseph; Piazza, Gary A.; Li, Han; Liu, Li; Fetter, John; Zhu, Bing; Sperl, Gerhard; Ahnen, Dennis; Pamukcu, Rifat
CORPORATE SOURCE: Cell Pathways, Inc., Horsham, PA, 19044, USA

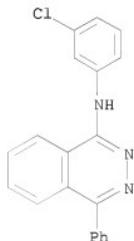
SOURCE: Cancer Research (2000), 60(13), 3338-3342
 CODEN: CNREAS; ISSN: 0008-5472
 PUBLISHER: American Association for Cancer Research
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Sulindac sulfone (exisulind), although a nonsteroidal antiinflammatory drug derivative, induces apoptosis in tumor cells by a mechanism that does not involve cyclooxygenase inhibition. SW480 colon tumor cells contain guanosine 3',5'-monophosphate (cGMP) phosphodiesterase (PDE) isoforms of the PDE5 and PDE2 gene families that are inhibited by exisulind and new synthetic analogs. The analogs maintain rank order of potency for PDE inhibition, apoptosis induction, and growth inhibition. A novel mechanism for exisulind to induce apoptosis is studied involving sustained increases in cGMP levels and cGMP-dependent protein kinase (PKG) induction not found with selective PDE5 or most other PDE inhibitors. Accumulated β -catenin, shown to be a substrate for PKG, is decreased by exisulind, suggesting a mechanism to explain apoptosis induction in neoplastic cells harboring adenomatous polyposis coli gene mutations.
 IT 78351-75-4, MY5445
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (exisulind induced apoptosis involving cGMP phosphodiesterase inhibition, protein kinase G activation, and β -catenin attenuation)
 RN 78351-75-4 CAPLUS
 CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 52 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:335251 CAPLUS
 DOCUMENT NUMBER: 132:343299
 TITLE: Method for treating a patient with neoplasia with an anthracycline antibiotic and a cGMP-specific phosphodiesterase inhibitor
 INVENTOR(S): Pamukcu, Rifat; Menander, Kerstin B.
 PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
 SOURCE: PCT Int. Appl., 89 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 2000027404 | A1 | 20000518 | WO 1999-US26717 | 19991112 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1131076 | A1 | 20010912 | EP 1999-963888 | 19991112 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002529418 | T | 20020910 | JP 2000-580633 | 19991112 |
| US 20030130210 | A1 | 20030710 | US 2002-274709 | 20021021 |
| PRIORITY APPLN. INFO.: | | | US 1998-190907 | A2 19981112 |
| | | | WO 1999-US26717 | W 19991112 |
| | | | US 2000-632561 | B1 20000804 |
| AB A method for treating a patient with neoplasia is provided which employs an anthracycline antibiotic and a cGMP-specific phosphodiesterase inhibitor. | | | | |
| IT 78351-75-4, MY5445 | | | | |
| RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) | | | | |
| (anthracycline antibiotic and cGMP-specific phosphodiesterase inhibitor for treatment of neoplasia) | | | | |
| RN 78351-75-4 CAPLUS | | | | |
| CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME) | | | | |

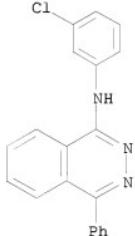


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 53 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:335250 CAPLUS
 DOCUMENT NUMBER: 132:343298
 TITLE: Method for treating a patient with neoplasia with a pyrimidine analog and a cGMP-specific phosphodiesterase inhibitor
 INVENTOR(S): Pamukcu, Rifat; Menander, Kerstin B.
 PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
 SOURCE: PCT Int. Appl., 91 pp.
 CODEN: PIXD2
 DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--|----------|-----------------|-------------|
| WO 2000027403 | A1 | 20000518 | WO 1999-US26628 | 19991112 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 20020022586 | A1 | 20020221 | US 2000-734633 | 20001212 |
| PRIORITY APPLN. INFO.: | | | US 1998-190343 | A2 19981112 |
| | | | WO 1999-US26628 | A 19991112 |
| AB | A method for treating a patient with neoplasia is provided which employs a pyrimidine analog and a cGMP-specific phosphodiesterase inhibitor. | | | |
| IT | 78351-75-4, MY5445 | | | |
| RL | BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(pyrimidine analog and cGMP-specific phosphodiesterase inhibitor for treatment of neoplasia) | | | |
| RN | 78351-75-4 CAPLUS | | | |
| CN | 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME) | | | |



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 54 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:335240 CAPLUS
DOCUMENT NUMBER: 132:343297
TITLE: Method for treating a patient with neoplasia with a platinum coordination complex and a cGMP-specific phosphodiesterase inhibitor
INVENTOR(S): Pamukcu, Rifat; Menander, Kerstin B.
PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000027391 | A1 | 20000518 | WO 1999-US27006 | 19991112 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6235782 | B1 | 20010522 | US 1998-190830 | 19981112 |
| EP 1131069 | A1 | 20010912 | EP 1999-958979 | 19991112 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002529412 | T | 20020910 | JP 2000-580620 | 19991112 |
| US 20010012858 | A1 | 20010809 | US 2001-777395 | 20010206 |
| US 6359002 | B2 | 20020319 | | |
| US 20020091157 | A1 | 20020711 | US 2002-39154 | 20020103 |
| US 20020137722 | A1 | 20020926 | US 2002-38634 | 20020103 |
| US 6472420 | B2 | 20021029 | | |
| US 200301113382 | A1 | 20030619 | US 2002-228700 | 20020827 |
| US 6869944 | B2 | 20050322 | | |

PRIORITY APPLN. INFO.:

| | | |
|-----------------|----|----------|
| US 1998-190830 | A2 | 19981112 |
| WO 1999-US27006 | W | 19991112 |
| US 2001-777359 | A3 | 20010206 |
| US 2001-777395 | A3 | 20010206 |
| US 2002-39154 | B1 | 20020103 |

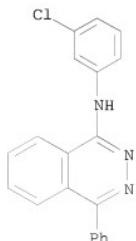
AB A method for treating a patient with neoplasia is provided which employs a platinum coordination complex and a cGMP-specific phosphodiesterase inhibitor.

IT 78351-75-4, MY5445

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(platinum coordination complex and cGMP-specific phosphodiesterase inhibitor for treatment of neoplasia)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2000:335174 CAPLUS
 DOCUMENT NUMBER: 132:343296
 TITLE: Method for treating a patient with neoplasia with a paclitaxel derivative and a cGMP-specific phosphodiesterase inhibitor
 INVENTOR(S): Pamukcu, Rifat; Menander, Kerstin B.
 PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
 SOURCE: PCT Int. Appl., 92 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000027194 | A1 | 20000518 | WO 1999-US27002 | 19991112 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6235776 | B1 | 20010522 | US 1998-190637 | 19981112 |
| EP 1128727 | A1 | 20010905 | EP 1999-965805 | 19991112 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002529376 | T | 20020910 | JP 2000-580444 | 19991112 |
| US 20010021720 | A1 | 20010913 | US 2001-777359 | 20010206 |
| US 6365627 | B2 | 20020402 | | |

PRIORITY APPLN. INFO.: US 1998-190637 A2 19981112
WO 1999-US27002 W 19991112

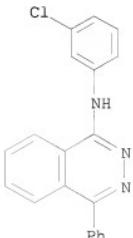
AB A method for treating a patient with neoplasia is provided which employs a paclitaxel derivative and a cGMP-specific phosphodiesterase inhibitor.

IT 78351-75-4, MY5445

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(paclitaxel derivative and cGMP-specific phosphodiesterase inhibitor for treatment of neoplasia)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 56 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:335173 CAPLUS
 DOCUMENT NUMBER: 132:343295
 TITLE: Method for treating a patient with neoplasia with a gonadotropin releasing hormone analog and a cGMP-specific phosphodiesterase inhibitor
 INVENTOR(S): Alila, Hector; Pamukcu, Rifat; Menander, Kerstin B.
 PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
 SOURCE: PCT Int. Appl., 91 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|-------------|
| WO 2000027193 | A1 | 20000518 | WO 1999-US267116 | 19991112 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 20020193286 | A1 | 20021219 | US 2002-136140 | 20020430 |
| US 20030220252 | A1 | 20031127 | US 2003-377213 | 20030301 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1998-190030 | A2 19981112 |
| | | | US 2000-718113 | B1 20001120 |
| | | | US 2001-968207 | B1 20011002 |
| | | | US 2002-136140 | B1 20020430 |

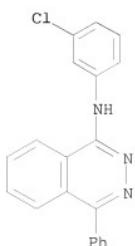
AB A method for treating a patient with neoplasia is provided which employs a gonadotropin-releasing hormone analog and a cGMP-specific phosphodiesterase inhibitor.

IT 78351-75-4, MY5445

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (gonadotropin releasing hormone analog and cGMP-specific phosphodiesterase inhibitor for treatment of neoplasia)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 57 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:303392 CAPLUS
DOCUMENT NUMBER: 133:101350
TITLE: Analysis of a mutation in phosphodiesterase type 4 that alters both inhibitor activity and nucleotide selectivity
AUTHOR(S): Herman, Sarah B.; Juilfs, Dawn M.; Fauman, Eric B.; Juneau, Paul; Menetski, Joseph P.
CORPORATE SOURCE: Departments of Molecular Biology, Parke-Davis Pharmaceutical Research/Division of Warner-Lambert, Ann Arbor, MI, USA
SOURCE: Molecular Pharmacology (2000), 57(5), 991-999
CODEN: MOPMA3; ISSN: 0026-895X
PUBLISHER: American Society for Pharmacology and Experimental Therapeutics
DOCUMENT TYPE: Journal
LANGUAGE: English

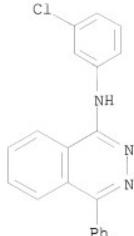
AB Cyclic nucleotide phosphodiesterase type 4 (PDE4) is a cAMP-specific phosphodiesterase that is found as four distinct genes in the mammalian genome (PDE4A, 4B, 4C, and 4D). Mutation anal. was done to identify the amino acids involved in activity and inhibitor selectivity. Mutations at Asp333 were made in HSPDE4D3 based on mutations that affect rolipram sensitivity in RNPDE4B1. The PDE4D3 Asp-Asn mutant was resistant to inhibition by rolipram as well as several other PDE4 inhibitors tested. These results suggest that this residue is near the inhibitor binding pocket in PDE4D3. Sequence comparison of PDE4 with cGMP-specific PDE proteins shows a conserved aspartic acid at position 333 in PDE4D3 and a conserved asparagine at this position in PDE enzymes that hydrolyze cGMP. Therefore, cGMP hydrolysis by PDE4D3 Asp-Asn was measured. PDE4D3 Asp-Asn hydrolyzed cGMP with kinetic consts. similar to those observed for this protein with cAMP (K_m apprx. 20 μ M, V_{max} apprx. 2 μ mol AMP/min/mg recombinant protein). Under identical conditions, the K_m value for cAMP hydrolysis by wild-type PDE4D3 is 3 μ M and the V_{max} value is 1 μ mol AMP/min/mg recombinant protein. In addition, the PDE4D3 Asp-Ala mutant protein could hydrolyze cGMP. Finally, the analogous mutation in HSPDE4B1 (Asp413Asn) also allows hydrolysis of cGMP. These results show that this aspartic acid residue is important in inhibitor binding and nucleotide discrimination and suggest this residue is in the active site of PDE4.

IT 78351-75-4, My-5445

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(inhibition; mutation in cyclic nucleotide phosphodiesterase type 4 that alters both inhibitor activity and nucleotide selectivity)

RN 78351-75-4 CAPLUS

CN 1-Phtalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 58 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:290577 CAPLUS
 DOCUMENT NUMBER: 132:329928
 TITLE: Cyclooxygenase inhibition- and phosphodiesterase inhibition-based methods for identifying antineoplastic compounds, and pharmaceutical compositions
 INVENTOR(S): Liu, Li; Zhu, Bing; Han, Li; Thompson, Joseph W.; Pamukeu, Rifat; Piazza, Gary A.
 PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
 SOURCE: Eur. Pat. Appl., 65 pp.
 CODEN: EPXWDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|------------------|----------|
| EP 997145 | A1 | 20000503 | EP 1999-308129 | 19991014 |
| EP 997145 | B1 | 20020327 | | |
| R: AT, BE, CH,
IE, SI, LT,
LV, FI, RO | DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | |
| US 6200771 | B1 | 20010313 | US 1998-173375 | 19981015 |
| US 6130053 | A | 20001010 | US 1999-366003 | 19990803 |
| US 20020009764 | A1 | 20020124 | US 1999-414628 | 19991008 |
| IL 132366 | A | 20060312 | IL 1999-132366 | 19991013 |
| CA 2284853 | A1 | 20000415 | CA 1999-2284853 | 19991014 |
| NO 9904995 | A | 20000417 | NO 1999-4995 | 19991014 |
| ZA 9906508 | A | 20000418 | ZA 1999-6508 | 19991014 |
| AU 9954010 | A | 20000420 | AU 1999-54010 | 19991014 |
| AU 770308 | B2 | 20040219 | | |
| EP 1161943 | A2 | 20011212 | EP 2001-119687 | 19991014 |
| EP 1161943 | A3 | 20031210 | | |
| R: AT, BE, CH,
IE, SI, LT,
LV, FI, RO | DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | |
| AT 214920 | T | 20020415 | AT 1999-308129 | 19991014 |
| ES 2174573 | T3 | 20021101 | ES 1999-308129 | 19991014 |
| TW 239837 | B | 20050921 | TW 1999-88117817 | 19991014 |
| KR 2000029189 | A | 20000525 | KR 1999-45451 | 19991015 |
| CN 1255379 | A | 20000607 | CN 1999-121818 | 19991015 |
| CN 100389829 | C | 20080528 | | |

| | | | | |
|------------------------|----|----------|----------------|-------------|
| TR 9902578 | A2 | 20000621 | TR 1999-2578 | 19991015 |
| JP 2000186047 | A | 20000704 | JP 1999-330364 | 19991015 |
| US 20030109418 | A1 | 20030612 | US 2002-187762 | 20020702 |
| US 20030175833 | A1 | 20030918 | US 2002-251165 | 20020920 |
| US 20040009464 | A1 | 20040115 | US 2002-253629 | 20020924 |
| US 20050244914 | A1 | 20051103 | US 2005-176073 | 20050707 |
| NO 2006002682 | A | 20000417 | NO 2006-2682 | 20060609 |
| PRIORITY APPLN. INFO.: | | | US 1998-173375 | A 19981015 |
| | | | US 1999-366003 | A 19990803 |
| | | | US 1999-414628 | A 19991008 |
| | | | US 1999-414626 | B1 19991008 |
| | | | EP 1999-308129 | A3 19991014 |
| | | | US 1999-420966 | B1 19991020 |
| | | | US 2002-253629 | B3 20020924 |

AB A pharmaceutical composition is disclosed for the treatment of neoplasia which comprises a pharmaceutically acceptable carrier and a compound selected by (1) determining the cyclooxygenase (COX) inhibitory activity of the compd; (2) determining the phosphodiesterase (PDE) inhibition activity of the compound, in which the PDE is characterized by (a) cGMP specificity over cAMP, (b) pos. cooperative kinetic behavior in the presence of cGMP substrate, (c) submicromolar affinity for cGMP, and (d) insensitivity to incubation with purified cGMP-dependent protein kinase; and (3) selecting the compound that has COX inhibitory activity lower than the PDE activity for treating neoplasia. Also provided is a method for selecting a compound for the treatment of neoplasia which comprises (1) determining the COX inhibitory activity of the compound; (2) determining the PDE2 inhibition activity of the compound; and (3) selecting the compound that has COX inhibitory activity lower than the PDE activity for treating neoplasia. Isolation of a novel cGMP-specific PDE (appearing to be a novel conformation of PDE2) from neoplastic cells is described.

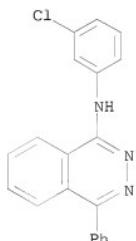
IT 78351-75-4, MY5445

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(cyclooxygenase inhibition- and phosphodiesterase inhibition-based methods for identifying antineoplastic compds., and pharmaceutical compns.)

RN 78351-75-4 CAPLUS

CN 1-Phtalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



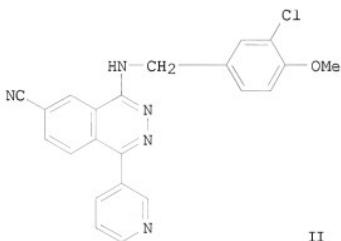
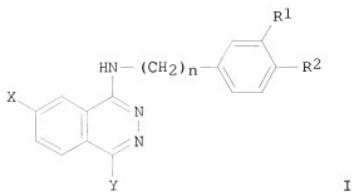
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 59 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:549262 CAPLUS
 DOCUMENT NUMBER: 131:184957

TITLE: Preparation of phthalazine derivatives for treatment
 of erectile dysfunction
 INVENTOR(S): Watanabe, Nobuhisa; Karibe, Norio; Miyazaki, Kazuki;
 Ozaki, Fumihiro; Kamada, Atsushi; Miyazawa, Shuhei;
 Naoe, Yoshimitsu; Kaneko, Toshihiko; Tsukada, Itaru;
 Nagakura, Tadashi; Ishihara, Hiroki; Kodama, Kohtarou;
 Adachi, Hideyuki
 PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 148 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------------|-----------------|----------|
| WO 9942452 | A1 | 19990826 | WO 1999-JP688 | 19990217 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KR, KZ, LC, LK, LS, LT, LU, LV, MD, MG, MK, MN, MW,
MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2302943 | A1 | 19990826 | CA 1999-2302943 | 19990217 |
| CA 2302943 | C | 20070807 | | |
| AU 9925470 | A | 19990906 | AU 1999-25470 | 19990217 |
| AU 755361 | B2 | 20021212 | | |
| JP 2000204080 | A | 20000725 | JP 1999-38445 | 19990217 |
| JP 3947627 | B2 | 20070725 | | |
| BR 9909369 | A | 20001128 | BR 1999-9369 | 19990217 |
| EP 1057819 | A1 | 20001206 | EP 1999-905213 | 19990217 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI | | | | |
| HU 2000003219 | A2 | 20010528 | HU 2000-3219 | 19990217 |
| HU 2000003219 | A3 | 20010730 | | |
| NZ 503399 | A | 20030131 | NZ 1999-503399 | 19990217 |
| RU 2229476 | C2 | 20040527 | RU 2000-104870 | 19990217 |
| CN 1210265 | C | 20050713 | CN 1999-801472 | 19990217 |
| NO 2000000969 | A | 20000811 | NO 2000-969 | 20000225 |
| NO 317877 | B1 | 20041227 | | |
| US 6498159 | B1 | 20021224 | US 2000-508197 | 20000308 |
| MX 2000002417 | A | 20001030 | MX 2000-2417 | 20000309 |
| US 20030105074 | A1 | 20030605 | US 2002-281194 | 20021028 |
| US 6699870 | B2 | 20040302 | | |
| PRIORITY APPLN. INFO.: | | | | |
| | | JP 1998-37020 | A | 19980219 |
| | | JP 1998-319540 | A | 19981110 |
| | | WO 1999-JP688 | W | 19990217 |
| | | US 2000-508197 | A3 | 20000308 |

OTHER SOURCE(S): MARPAT 131:184957
 GI



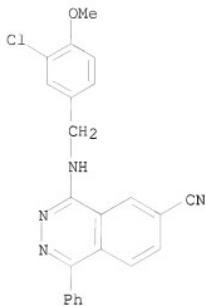
AB The title compds. I [R1 and R2 are the same or different and each represents halogeno, optionally halogenated alkyl or alkoxy, or cyano; X represents cyano, nitro, halogeno, optionally substituted hydroximino or optionally substituted heteroaryl; and Y represents heteroaryl, aryl, alkynyl, alkenyl, alkyl or cyclic amine; n = 1 - 3; a proviso is given] are prepared. The title compound II in vitro showed IC50 of 0.78 nM against the type 5 phosphodiesterase.

IT 240399-27-3P 240399-84-2P 240399-85-3P
 240399-86-4P 240399-87-5P 240399-88-6P
 240399-89-7P 240399-90-0P 240399-91-1P
 240401-44-9P 240401-45-0P 240401-50-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of phthalazine derivs. for treatment of erectile dysfunction)

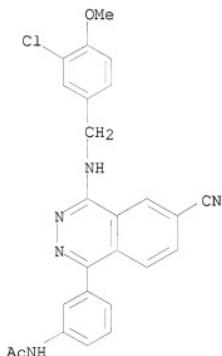
RN 240399-27-3 CAPLUS

CN 6-Phthalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methyl]amino]-1-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

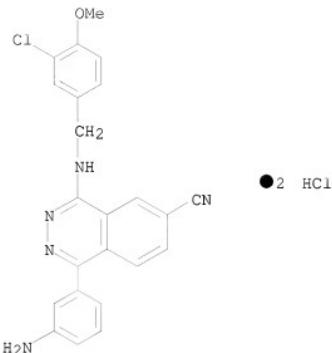


● HCl

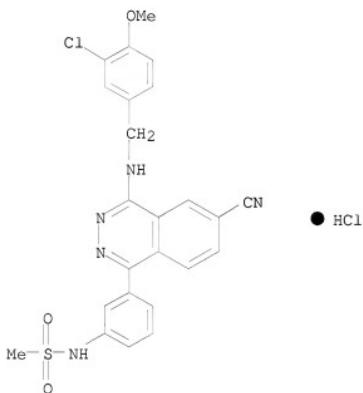
RN 240399-84-2 CAPLUS
CN Acetamide, N-[3-{4-[(3-chloro-4-methoxyphenyl)methyl]amino}-6-cyano-1-phthalazinyl]phenyl]- (CA INDEX NAME)



RN 240399-85-3 CAPLUS
CN 6-Phtalazinecarbonitrile, 1-(3-aminophenyl)-4-[(3-chloro-4-methoxyphenyl)methyl]amino-, hydrochloride (1:2) (CA INDEX NAME)

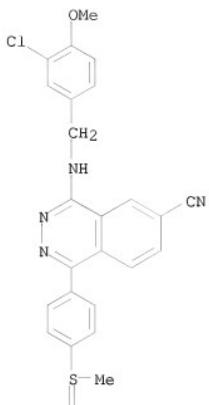


RN 240399-86-4 CAPLUS
 CN Methanesulfonamide, N-[3-{4-[(3-chloro-4-methoxyphenyl)methyl]amino}-6-cyano-1-phthalazinyl]phenyl-, hydrochloride (1:1) (CA INDEX NAME)



RN 240399-87-5 CAPLUS
 CN 6-Phtalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methylamino]-1-[4-(methylsulfinyl)phenyl]-, hydrochloride (1:1) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

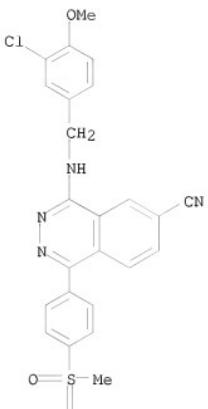


● HCl

RN 240399-88-6 CAPLUS

CN 6-Phthalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methyl]amino]-1-[4-(methylsulfonyl)phenyl]-, hydrochloride (1:1) (CA INDEX NAME)

PAGE 1-A



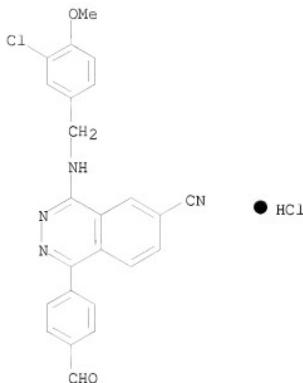
PAGE 2-A



● HCl

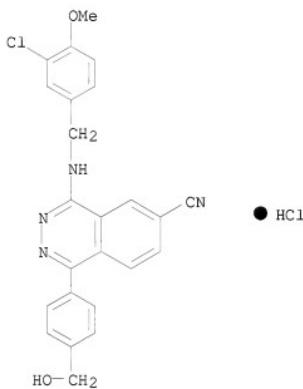
RN 240399-89-7 CAPLUS

CN 6-Phtalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methylamino]-1-(4-formylphenyl)-, hydrochloride (1:1) (CA INDEX NAME)



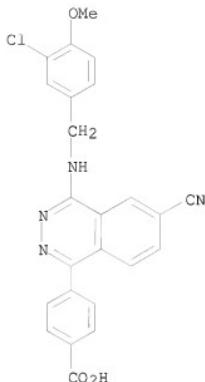
RN 240399-90-0 CAPLUS

CN 6-Phthalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methyl]amino]-1-[4-(hydroxymethyl)phenyl]-, hydrochloride (1:1) (CA INDEX NAME)



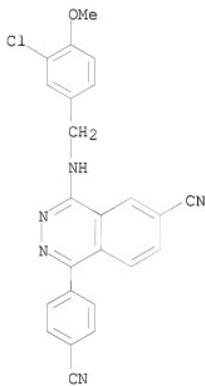
RN 240399-91-1 CAPLUS

CN Benzoic acid, 4-[4-[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-1-phthalazinyl- (CA INDEX NAME)



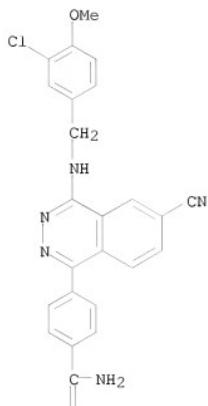
RN 240401-44-9 CAPLUS

CN 6-Phtalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methyl]amino)-1-(4-cyanophenyl)- (CA INDEX NAME)

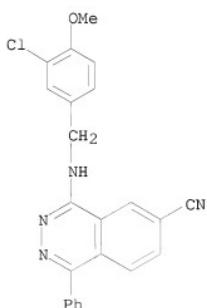


RN 240401-45-0 CAPLUS

CN Benzanide, 4-[4-[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-1-phthalazinyl- (CA INDEX NAME)

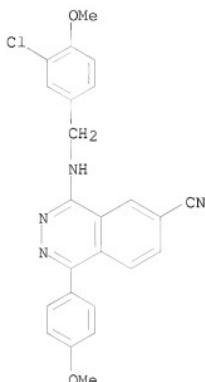


RN 240401-50-7 CAPLUS
 CN 6-Phthalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methylamino]-1-phenyl- (CA INDEX NAME)

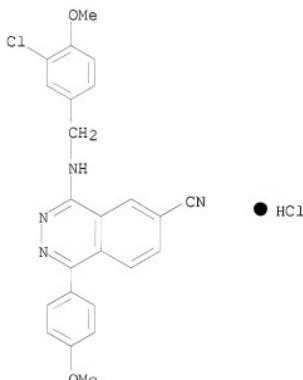


IT 240400-66-2P 240400-67-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of phthalazine derivs. for treatment of erectile dysfunction)
RN 240400-66-2 CAPLUS
CN 6-Phthalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methyl]amino]-1-(4-methoxyphenyl)- (CA INDEX NAME)



RN 240400-67-3 CAPLUS
CN 6-Phthalazinecarbonitrile, 4-[(3-chloro-4-methoxyphenyl)methyl]amino]-1-(4-methoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 60 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:325805 CAPLUS

DOCUMENT NUMBER: 130:332916
 TITLE: Enhanced opening of abnormal brain tissue capillaries
 with cyclic GMP-specific phosphodiesterase inhibitors
 and bradykinin
 INVENTOR(S): Black, Keith L.
 PATENT ASSIGNEE(S): The Regents of the University of California, USA
 SOURCE: PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9924053 | A1 | 19990520 | WO 1998-US23932 | 19981110 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
UA, UG, UZ, VN, YU, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6043223 | A | 20000328 | US 1997-968169 | 19971112 |
| CA 2309947 | A1 | 19990520 | CA 1998-2309947 | 19981110 |
| AU 9913154 | A | 19990531 | AU 1999-13154 | 19981110 |
| AU 745588 | B2 | 20020321 | | |
| EP 1028740 | A1 | 20000823 | EP 1998-956694 | 19981110 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LT, LU, NL, SE, MC, PT,
IE, FI | | | | |
| PRIORITY APPLN. INFO.: | | | US 1997-968169 | A 19971112 |
| | | | WO 1998-US23932 | W 19981110 |

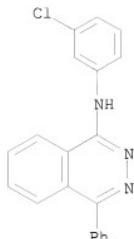
AB Improved compns. and methods are disclosed for increasing permeability of abnormal brain tissue to pharmaceutical agents. Cyclic GMP-specific phosphodiesterase inhibitors are combined with bradykinin or a bradykinin analog to provide enhanced permeability of brain capillaries which is limited to abnormal brain tissue. Neuropharmaceutical and neurodiagnostic agents introduced into the bloodstream are directed selectively to the abnormal brain tissue. The pharmaceutical preparation composed of bradykinin or a bradykinin analog and a cyclic GMP-specific phosphodiesterase inhibitor may be administered either i.v. or directly into the carotid artery. The combined administration of zaprinast and bradykinin in rats with RG2 gliomas significantly increased the transfer constant in tumors for [¹⁴C]-AIB compared to bradykinin infusion alone. The combined bradykinin-zaprinast treatment provided less of an increase in transfer constant for dextran compared to AIB. In non-tumor regions, the transfer constant of either tracer showed no significant increase.

IT 78351-75-4, MY-5445

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (enhanced opening of abnormal brain tissue capillaries with cyclic GMP-specific phosphodiesterase inhibitors and bradykinin)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



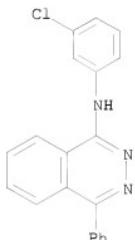
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 61 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:64688 CAPLUS
 DOCUMENT NUMBER: 130:119618
 TITLE: Use of phosphodiesterase inhibitors in the treatment of prostatic diseases
 INVENTOR(S): Forssmann, Wolf-Georg; Stief, Christian Georg; Truss, Michael Carsten; Uckert, Stefan; Jonas, Udo
 PATENT ASSIGNEE(S): Germany
 SOURCE: PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| WO 9902161 | A1 | 19990121 | WO 1997-EP3617 | 19970709 |
| W: AU, CA, US | | | | |
| CN 1205634 | A | 19990120 | CN 1996-197169 | 19960801 |
| CA 2295616 | A1 | 19990121 | CA 1997-2295616 | 19970709 |
| US 20020025969 | A1 | 20020228 | US 2000-462090 | 20000406 |
| US 20030199517 | A1 | 20031023 | US 2003-443870 | 20030523 |
| PRIORITY APPLN. INFO.: | | | WO 1997-EP3617 | A 19970709 |
| | | | US 2000-462090 | B1 20000406 |

AB The invention pertains to the use of inhibitors of phosphodiesterase I, IV and V for the prophylaxis and treatment of prostatic diseases, in particular the use of (a) 2-(2-propoxyphenyl)-8-azapurin-6-one (zaprinast); (b) dipyridamole; (c) 1-(3-chlorophenylamino)-4-phenylphthalazine (M5445); (d) 2-(N-(4-carboxypiperidine-6-chloro-4-(3,4-methylenedioxy)benzyl)amino)quinazoline (E 4021, ER 21355); (e) 2,3-dihydro-8-hydroxy-7-nitro-1,4-benzodioxine-2-methanol, α -nitrate (E 4701); (f) 4-((3,4-(methylenedioxy)benzyl)amino)-6,7,8-trimethoxyquinazoline; (g) 1-methyl-3-propyl-6-(5-(N-(4-methylmorpholin-4-yl)sulfonyl)-2-ethoxyphenyl)pyrazole [4,5lpurimidin-4(5H)one (sildenafil); (i) 1-cyclopentyl-3-methyl-6-(4-pyridinyl)pyrazolo(3,4-d)pyrimidin-4(5H)-one (WIN 58237); (j) 7-(3-(4-acetyl-3-hydroxy-2-propyl-phenoxy)-2-hydroxypropoxy)-2-carboxy-2,3-didehydro-chronan-4-one (FPL-557212); (k) quinazolines and their trimethoxy derivs.; (l) Pyrazolopyrimidones; as well as pharmacol. compatible salts thereof, quinazolines and their

trimethoxy derivs., pyrazolopyrimidones or compatible salts thereof, in local and systemic administration.
 IT 78351-75-4, MT5445
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (phosphodiesterase inhibitors for treatment of prostatic disease)
 RN 78351-75-4 CAPLUS
 CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 62 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1998:779868 CAPLUS
 DOCUMENT NUMBER: 130:33003
 TITLE: Method evaluating inhibition of phosphodiesterase and cyclooxygenase activities, growth inhibition and apoptosis induction for identifying compounds for inhibition of neoplastic lesions
 INVENTOR(S): Pamukcu, Rifaat; Piazza, Gary A.; Thompson, W. Joseph
 PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
 SOURCE: Eur. Pat. Appl., 31 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|------------------|----------|
| EP 881300 | A2 | 19981202 | EP 1998-304247 | 19980529 |
| EP 881300 | A3 | 19990120 | | |
| EP 881300 | B1 | 20010117 | | |
| R: AT, BE, CH,
IE, SI, LT,
LV, FI, RO | DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | |
| US 5858694 | A | 19990112 | US 1997-866027 | 19970530 |
| CA 2238283 | A1 | 19981130 | CA 1998-2238283 | 19980520 |
| CA 2238283 | C | 20020820 | | |
| TW 591111 | B | 20040611 | TW 1998-87108072 | 19980525 |
| CZ 295868 | B6 | 20051116 | CZ 1998-1651 | 19980528 |
| NO 9802477 | A | 19981201 | NO 1998-2477 | 19980529 |
| NO 321717 | B1 | 20060626 | | |
| AU 9869794 | A | 19981210 | AU 1998-69794 | 19980529 |
| AU 709666 | B2 | 19990902 | | |

| | | | | |
|---|----|----------|----------------|-------------|
| JP 11094823 | A | 19990409 | JP 1998-150033 | 19980529 |
| JP 3053381 | B2 | 20000619 | | |
| ZA 9804646 | A | 19991129 | ZA 1998-4646 | 19980529 |
| JP 2000198746 | A | 20000718 | JP 2000-44184 | 19980529 |
| EP 1038523 | A2 | 20000927 | EP 2000-112020 | 19980529 |
| EP 1038523 | A3 | 20001025 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI | | | | |
| AT 198771 | T | 20010215 | AT 1998-304247 | 19980529 |
| ES 2132055 | T3 | 20010501 | ES 1998-304247 | 19980529 |
| IL 124699 | A | 20030212 | IL 1998-124699 | 19980529 |
| CN 1224761 | A | 19990804 | CN 1998-102044 | 19980601 |
| CN 1122110 | C | 20030924 | | |
| HK 1012196 | A1 | 20010412 | HK 1998-113546 | 19981216 |
| US 6156528 | A | 20001205 | US 1998-216070 | 19981219 |
| JP 2000028601 | A | 20000128 | JP 1999-189615 | 19990702 |
| JP 3234818 | B2 | 20011204 | | |
| US 20030004093 | A1 | 20030102 | US 2002-40776 | 20020107 |
| US 20030064421 | A1 | 20030403 | US 2002-253849 | 20020924 |
| PRIORITY APPLN. INFO.: | | | US 1997-866027 | A 19970530 |
| | | | US 1998-46739 | A 19980324 |
| | | | EP 1998-304247 | A3 19980529 |
| | | | JP 1998-150033 | A3 19980529 |
| | | | US 1998-216070 | A2 19981219 |
| | | | US 2000-602980 | B1 20000623 |
| | | | US 2000-664035 | B1 20000918 |

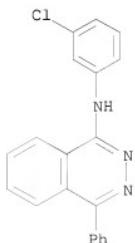
AB A method is provided for identification of compds. potentially useful for the treatment of neoplasia in mammals. The phosphodiesterase activity of a compound is determined along with cyclooxygenase inhibitory activity. Growth inhibitory and apoptosis-inducing effects on cultured tumor cells are also determined. Compds. that exhibit phosphodiesterase inhibition, growth inhibition, and apoptosis induction, but not substantial prostaglandin inhibitory activity, are desirable for treatment of neoplasia.

IT 78351-75-4, MY5445
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method evaluating inhibition of phosphodiesterase and cyclooxygenase activities, growth inhibition and apoptosis induction for identifying antineoplastic compds.)

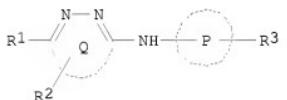
RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



DOCUMENT NUMBER: 129:310903
 ORIGINAL REFERENCE NO.: 129:63301a, 63304a
 TITLE: Pyridazine and phthalazine derivatives, their preparation and use as anticonvulsants
 INVENTOR(S): Harling, John David; Herdon, Hugh Jonathan; Orlek, Barry Sidney; Thompson, Mervyn
 PATENT ASSIGNEE(S): Smithkline Beecham PLC, UK
 SOURCE: PCT Int. Appl., 26 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--|----------|--|--------------------------------------|
| WO 9846574 | A1 | 19981022 | WO 1998-EP2172 | 19980414 |
| W: CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE | | | | |
| CA 2288171 | A1 | 19981022 | CA 1998-2288171 | 19980414 |
| EP 975605 | A1 | 20000202 | EP 1998-920520 | 19980414 |
| R: BE, CH, DE, ES, FR, GB, IT, LI, NL | | | | |
| JP 2001518908 | T | 20011016 | JP 1998-543490
GB 1997-7693
WO 1998-EP2172 | 19980414
A 19970416
W 19980414 |
| PRIORITY APPLN. INFO.: | | | | |
| OTHER SOURCE(S): GI | CASREACT 129:310903; MARPAT 129:310903 | | | |



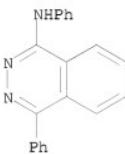
AB A method of treatment and/or prophylaxis of anxiety, mania, depression, panic disorders, and/or aggression, disorders associated with a subarachnoid hemorrhage or neural shock, the effects associated with withdrawal from substances of abuse such as cocaine, nicotine, alc., and benzodiazepines, disorders treatable and/or preventable with anticonvulsive agents such as epilepsy (including posttraumatic epilepsy), Parkinson's disease, psychosis, migraine, cerebral ischemia, Alzheimer's disease, and other degenerative diseases such as Huntington's chorea, schizophrenia, obsessive-compulsive disorders (OCD), neurol. deficits associated with AIDS, sleep disorders (including circadian rhythm disorders, insomnia and narcolepsy), tics (e.g. Gilles de la Tourette's syndrome), traumatic brain injury, tinnitus, neuralgia (especially trigeminal neuralgia), neuropathic pain, dental pain, cancer pain, inappropriate neuronal activity resulting in neurodysesthesias in diseases such as diabetes, multiple sclerosis, and motor neuron disease, ataxias, muscular rigidity (spasticity), temporomandibular joint dysfunction, and amyotrophic lateral sclerosis is provided. This method comprises administering an effective or prophylactic amount of a compound I (ring system Q = pyridazinyl, phthalazinyl; ring system P = Ph, pyridyl; R1 = H, C1-6 alkyl, Ph, C1-6 alkylphenyl; R2 = H, C1-6 alkyl; R3 = H, ≤3 substituents selected from halo, CN, CF3, OCF3, Cl-6 alkyl, Cl-6 alkoxy, Cl-6 alkylcarbonyl, Cl-6 alkoxycarbonyl, Ph, OPh, phenyl-C1-4-alkyl, PhCH2O, Bz) or a

pharmaceutically acceptable salt or solvate thereof. Thus, 3-chlorophenyl-(6-phenylpyridazin-3-yl)amine (II) bound to receptors in rat forebrain with $pK_1 > 6.5$. 3-Chlorophenyl-(4-phenylphthalazin-1-yl)amine (5 mg/kg i.v.) increased the maximum electroshock seizure threshold in mice by 67%. II was prepared by heating 3-chloro-6-phenylpyridazine with an excess of 3-chloroaniline at 100° for 1 h.

IT 10132-04-4P 78351-72-1P 78351-73-2P
78351-74-3P 78351-75-4P 78351-76-5P
78351-86-7P 78351-89-0P 78351-92-5P
214919-54-7P 214919-55-8P 214919-56-9P
214919-57-0P 214919-58-1P 214919-59-2P
214919-60-5P 214919-62-7P 214919-64-9P
214919-66-1P 214919-68-3P 214919-70-7P
214919-72-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyridazine and phthalazine derivs., their preparation and use as anticonvulsants)

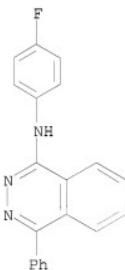
RN 10132-04-4 CAPLUS

CN 1-Phthalazinamine, N,4-diphenyl- (CA INDEX NAME)



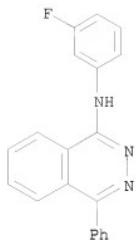
RN 78351-72-1 CAPLUS

CN 1-Phthalazinamine, N-(4-fluorophenyl)-4-phenyl- (CA INDEX NAME)

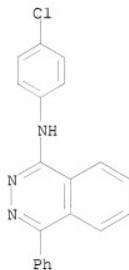


RN 78351-73-2 CAPLUS

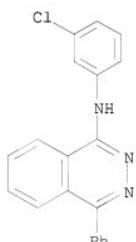
CN 1-Phthalazinamine, N-(3-fluorophenyl)-4-phenyl- (CA INDEX NAME)



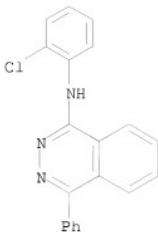
RN 78351-74-3 CAPLUS
CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-phenyl- (CA INDEX NAME)



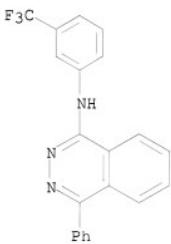
RN 78351-75-4 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



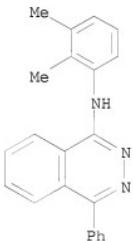
RN 78351-76-5 CAPLUS
CN 1-Phthalazinamine, N-(2-chlorophenyl)-4-phenyl- (CA INDEX NAME)



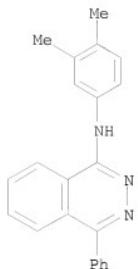
RN 78351-86-7 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



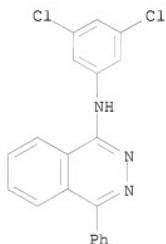
RN 78351-89-0 CAPLUS
CN 1-Phthalazinamine, N-(2,3-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



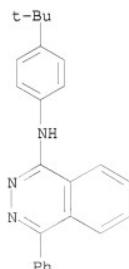
RN 78351-92-5 CAPLUS
CN 1-Phthalazinamine, N-(3,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



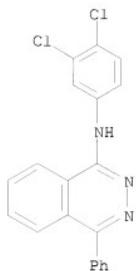
RN 214919-54-7 CAPLUS
CN 1-Phthalazinamine, N-(3,5-dichlorophenyl)-4-phenyl- (CA INDEX NAME)



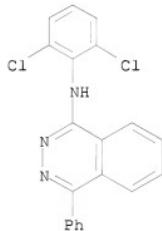
RN 214919-55-8 CAPLUS
CN 1-Phthalazinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-phenyl- (CA INDEX NAME)



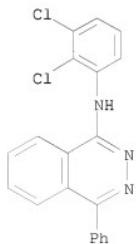
RN 214919-56-9 CAPLUS
CN 1-Phthalazinamine, N-(3,4-dichlorophenyl)-4-phenyl- (CA INDEX NAME)



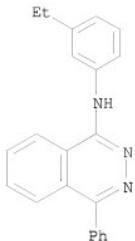
RN 214919-57-0 CAPLUS
CN 1-Phthalazinamine, N-(2,6-dichlorophenyl)-4-phenyl- (CA INDEX NAME)



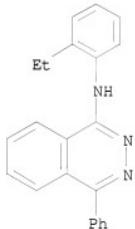
RN 214919-58-1 CAPLUS
CN 1-Phthalazinamine, N-(2,3-dichlorophenyl)-4-phenyl- (CA INDEX NAME)



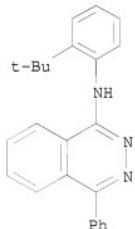
RN 214919-59-2 CAPLUS
CN 1-Phthalazinamine, N-(3-ethylphenyl)-4-phenyl- (CA INDEX NAME)



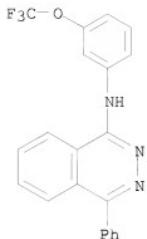
RN 214919-60-5 CAPLUS
CN 1-Phthalazinamine, N-(2-ethylphenyl)-4-phenyl- (CA INDEX NAME)



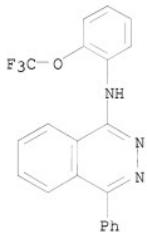
RN 214919-62-7 CAPLUS
CN 1-Phthalazinamine, N-[2-(1,1-dimethylethyl)phenyl]-4-phenyl- (CA INDEX NAME)



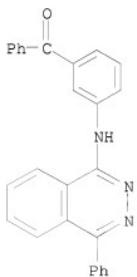
RN 214919-64-9 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[3-(trifluoromethoxy)phenyl]- (CA INDEX NAME)



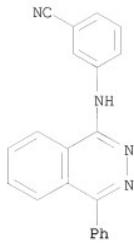
RN 214919-66-1 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[2-(trifluoromethoxy)phenyl]- (CA INDEX NAME)



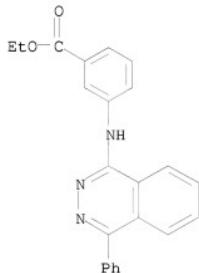
RN 214919-68-3 CAPLUS
CN Methanone, phenyl[3-[(4-phenyl-1-phthalazinyl)amino]phenyl]- (CA INDEX NAME)



RN 214919-70-7 CAPLUS
CN Benzonitrile, 3-[(4-phenyl-1-phthalazinyl)aminol]- (CA INDEX NAME)



RN 214919-72-9 CAPLUS
 CN Benzoic acid, 3-[(4-phenyl-1-phthalazinyl)amino]-, ethyl ester (CA INDEX NAME)



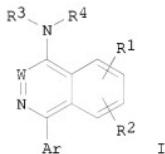
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 64 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1998:424231 CAPLUS
 DOCUMENT NUMBER: 129:81743
 ORIGINAL REFERENCE NO.: 129:16881a,16884a
 TITLE: Preparation of isoquinolinamines and phthalazinamines which interact with CRF receptors
 INVENTOR(S): Yuan, Jun; Yoon, Taeyoung
 PATENT ASSIGNEE(S): Neurogen Corp., USA; Yuan, Jun; Yoon, Taeyoung
 SOURCE: PCT Int. Appl., 39 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

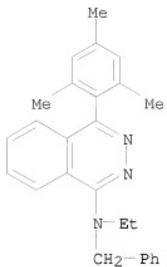
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9827066 | A1 | 19980625 | WO 1997-0823555 | 19971215 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, | | | | |

UG, US, UZ, VN, YU, ZW
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
 FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
 GA, GN, ML, MR, NE, SN, TD, TG
 CA 2275686 A1 19980625 CA 1997-2275686 19971215
 CA 2275686 C 20061017
 AU 9856141 A 19980715 AU 1998-56141 19971215
 EP 946520 A1 19991006 EP 1997-952558 19971215
 EP 946520 B1 20030402
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 JP 2001056653 T 20010522 JP 1998-527999 19971215
 AT 236134 T 20030415 AT 1997-952558 19971215
 US 6235752 B1 20010522 US 1999-331380 19990920
 US 20010036945 A1 20011101 US 2001-852991 20010510
 US 6440969 B2 20020827
 PRIORITY APPLN. INFO.: US 1996-768987 A1 19961218
 WO 1997-US23555 W 19971215
 US 1999-331380 A1 19990920

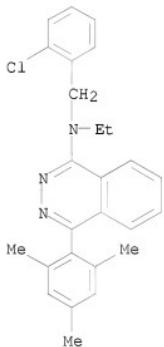
OTHER SOURCE(S): MARPAT 129:81743
GI



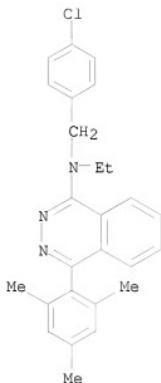
- AB The title compds. [I; Ar = substituted Ph, 1- or 2-naphthyl, 2-, 3-, or 4-pyridinyl, etc.; R1, R2 = H, halo, Cl-6 alkyl, etc.; R3, R4 = (un)substituted Cl-6 alkyl, Cl-6 alkylaryl (wherein aryl = Ph, 1- or 2-naphthyl, 2-, 3-, or 4-pyridinyl, etc.); W = N, CR6 (R6 = H, Cl-6 alkyl)], which are highly selective partial agonists or antagonists at human CRF1 receptors and therefore useful in the diagnosis and treatment of treating stress related disorders such as post traumatic stress disorder (PTSD) as well as depression, headache and anxiety, were prepared Thus, treatment of N-propyl-1-(2,4,6-trimethylphenyl)-4-isoquinolinamine (preparation described) with tBuOK in DMSO followed by slow dropwise addition of bromomethylcyclopropane afforded I [Ar = 2,4,6-Me3C6H2; W = CH; R1 = R2 = H; R3 = Pr; R4 = cyclopropylmethyl]. Compds. I typically have IC50 of 0.5 nM - 10 μM against CRF receptor binding.
- IT 209416-23-9P 209416-24-0P 209416-25-1P
 209416-26-2P 209416-27-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of isoquinolinamines and phthalazinamines which interact with CRF receptors)
- RN 209416-23-9 CAPTUS
- CN 1-Phthalazinamine, N-ethyl-N-(phenylmethyl)-4-(2,4,6-trimethylphenyl)-(CA INDEX NAME)



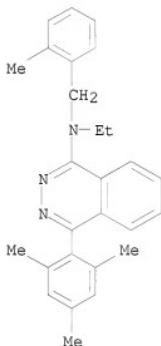
RN 209416-24-0 CAPLUS
CN 1-Phtalazinamine, N-[(2-chlorophenyl)methyl]-N-ethyl-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



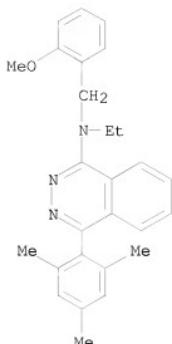
RN 209416-25-1 CAPLUS
CN 1-Phtalazinamine, N-[(4-chlorophenyl)methyl]-N-ethyl-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 209416-26-2 CAPLUS
CN 1-PhtHALAZINamine, N-ethyl-N-[(2-methylphenyl)methyl]-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



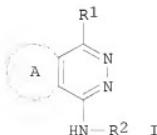
RN 209416-27-3 CAPLUS
CN 1-PhtHALAZINamine, N-ethyl-N-[(2-methoxyphenyl)methyl]-4-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 65 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1998:256306 CAPLUS
 DOCUMENT NUMBER: 129:12748
 ORIGINAL REFERENCE NO.: 129:2639a,2642a
 TITLE: Diabetic neuropathy inhibitors containing aminopyridazine derivatives causing no hemorrhage
 INVENTOR(S): Suzuki, Hiroko; Yamada, Kumi
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|-----------------|----------|
| JP 10109936 | A | 19980428 | JP 1996-264356 | 19961004 |
| PRIORITY APPLN. INFO.: | | | JP 1996-264356 | 19961004 |
| OTHER SOURCE(S): | MARPAT | 129:12748 | | |
| GI | | | | |



AB Prophylactic and therapeutic agents for diabetic neuropathy contain the derivs. I |R¹ = cyclohexyl or Ph, thiienyl, furyl, which may be substituted with ≥1 C1-4 alkyl, C1-4 alkoxy, halo; R² = CHR₃R₄ (R₃ = H, C1-4

alkyl; R4 = Cl-4 alkyl, cyclohexyl, thiienyl, or Ph which may be substituted with ≥ 1 Cl-4 alkyl, Cl-4 alkoxy, halo), cycloalkyl which may be substituted with ≥ 1 Cl-4 alkoxy, Cl-6 alkylene; ring A = benzene, thiophene, furan] or their pharmacol. acceptable salts as active ingredients. I show strong platelet aggregation-inhibiting action and cause no hemorrhage, and are especially useful for treatment of peripheral nerve disorders accompanied with diabetic complications in peripheral circulation, e.g. diabetic skin ulcer, arteriosclerosis obliterans, etc. (R)-1-(1-cyclohexylethylamino)-4-phenylphthalazine was prepared from 1-chloro-4-phenylphthalazine and (R)-(-)-1-cyclohexylethylamine, and converted into its fumarate (II). II significantly increased nerve conduction velocity in streptozotocin-induced diabetic rats.

IT 149549-14-4P 172485-71-1P

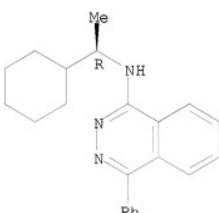
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of condensed aminopyridazines as diabetic neuropathy inhibitors causing no hemorrhage)

RN 149549-14-4 CAPLUS

CN 1-Phthalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 172485-71-1 CAPLUS

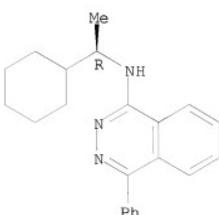
CN 1-Phthalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl-,
(2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 149549-14-4

CMF C22 H25 N3

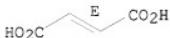
Absolute stereochemistry.



CM 2

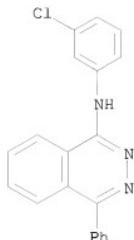
CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



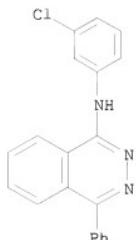
L6 ANSWER 66 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:390628 CAPLUS
DOCUMENT NUMBER: 127:9117
ORIGINAL REFERENCE NO.: 127:1833a,1836a
TITLE: Use of phosphodiesterase inhibitors for treatment of prostate diseases
INVENTOR(S): Truss, Michael Carsten; Ueckert, Stephan; Jonas, Udo
PATENT ASSIGNEE(S): Stief, Christian Georg, Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|----------|
| DE 19540642 | A1 | 19970507 | DE 1995-19540642 | 19951101 |
| PRIORITY APPLN. INFO.: | | | DE 1995-19540642 | 19951101 |
| AB | Inhibitors of prostate phosphodiesterases I, IV, and V induce relaxation of the prostate musculature without affecting blood vessels or other organs, and are therefore useful for specific treatment of prostate diseases such as benign hyperplasia, pollakiuria, and nycturia. Thus, a solution for injection contained vincopetine 50 and NaCl 750 mg in 100 mL distilled water, adjusted to pH 3.7 with 1N HCl. | | | |
| IT | 78351-75-4, MY 5445 | | | |
| RL | (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) | | | |
| | (use of phosphodiesterase inhibitors for treatment of prostate diseases) | | | |
| RN | 78351-75-4 CAPLUS | | | |
| CN | 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME) | | | |



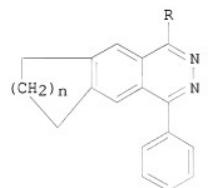
L6 ANSWER 67 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1997:313810 CAPLUS
 DOCUMENT NUMBER: 127:28713
 ORIGINAL REFERENCE NO.: 127:5365a,5368a
 TITLE: Dissociation between phosphodiesterase inhibition and antiproliferative effects of phosphodiesterase inhibitors on the Dami cell line
 AUTHOR(S): Turbanssen, Katja; Michel, Alain; Vittet, Daniel;
 Bonnet, Pierre-Antoine; Chevillard, Claude
 CORPORATE SOURCE: INSERM U.300, FACULTE DE PHARMACIE, MONTPELLIER,
 34060, Fr.
 SOURCE: Biochemical Pharmacology (1997), 53(8), 1141-1147
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Phosphodiesterase (PDE) inhibitors were shown to inhibit proliferation of various cell types. The present investigation was designed to study the activity of selective PDE inhibitors (8-MeoMIX, milrinone, trequinsin, rolipram, RO-201724, zaprinast, and MY-5445) on the proliferation of the Dami cell line in relation to their effects on cAMP levels and PDE isoenzymes isolated from Dami cells. All compds., except 8-Meo-MIX, elicited antiproliferative effects. Trequinsin, RO-201724, and MY-5445 (100 μ M) were found to inhibit cell growth up to 60%, 83%, and 85%, resp.; milrinone, rolipram and zaprinast elicited only weak effects (19-21% at 100 μ M). Their growth-inhibitory effects could not be related to their effects on cAMP levels. In addition, although PDE type III and IV inhibitors potentiated cAMP formation due to adenylyl cyclase activation, no potentiation could be observed when considering their antiproliferative effect. Separation and characterization of PDE of Dami cells revealed the existence of types III, IV, and V isoenzymes. The PDE inhibition found for the PDE inhibitors could not explain their antiproliferative effects. The lack of correlation with cAMP concns. or PDE inhibition and the high concns. needed to elicit antiproliferative effects suggest the implication of other parameters, such as cytotoxicity or lipophilicity, or other targets in addition to PDE for the PDE inhibitors tested. Lipophilicity did not seem to be of importance in antiproliferative effects. In contrast, cytotoxic effects, in particular those of trequinsin and MY-5445, could partially explain their neg. action on cell growth.
 IT 78351-75-4, MY-5445
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dissociation between phosphodiesterase inhibition and antiproliferative effects of phosphodiesterase inhibitors on the Dami cell line)
RN 78351-75-4 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

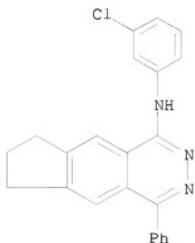
L6 ANSWER 68 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:577161 CAPLUS
DOCUMENT NUMBER: 125:300931
ORIGINAL REFERENCE NO.: 125:56327a,56330a
TITLE: Synthesis of σ -annelated phthalazines as potential blood platelet aggregation inhibitors
AUTHOR(S): Haider, Norbert; Steinwender, Andreas
CORPORATE SOURCE: Institute Pharmaceutical Chemistry, University Vienna,
Vienna, A-1090, Austria
SOURCE: Scientia Pharmaceutica (1996), 64(3/4), 399-405
PUBLISHER: Oesterreichische Apotheker-Verlagsgesellschaft
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



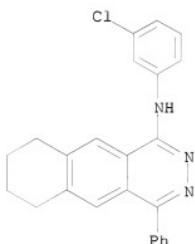
I

AB The phthalazines I ($n = 1-4$; R = NHR1; R1 = 3-ClC₆H₄, CH₂CMe₃) were prepared from the corresponding phthalazinones via the chloro compds. I ($n = 1-4$; R = Cl).
IT 182683-77-8P 182683-79-0P 182683-82-5P
182683-83-6P
RL: SPN (Synthetic preparation); PREP (Preparation)

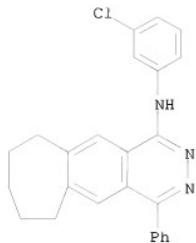
(preparation of phthalazines)
RN 182683-77-8 CAPLUS
CN 6H-Cyclopenta[g]phthalazin-1-amine,
N-(3-chlorophenyl)-7,8-dihydro-4-phenyl- (CA INDEX NAME)



RN 182683-79-0 CAPLUS
CN Benzo[g]phthalazin-1-amine, N-(3-chlorophenyl)-6,7,8,9-tetrahydro-4-phenyl-
(CA INDEX NAME)

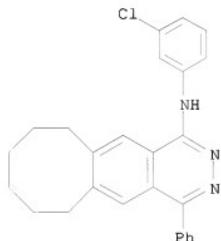


RN 182683-82-5 CAPLUS
CN 6H-Cyclohepta[g]phthalazin-1-amine,
N-(3-chlorophenyl)-7,8,9,10-tetrahydro-4-phenyl- (CA INDEX NAME)



RN 182683-83-6 CAPLUS

CN Cycloocta[g]phthalazin-1-amine, N-(3-chlorophenyl)-6,7,8,9,10,11-hexahydro-4-phenyl- (CA INDEX NAME)



L6 ANSWER 69 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:38242 CAPLUS

DOCUMENT NUMBER: 124:76533

ORIGINAL REFERENCE NO.: 124:14025a,14028a

TITLE: Medicament for therapeutic and prophylactic treatment of diseases caused by smooth muscle cell hyperplasia

INVENTOR(S): Yamada, Kumi; Tamao, Yoshikuni; Ohshima, Masahiro; Iwase, Norimichi

PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| EP 682947 | A1 | 19951122 | EP 1995-107372 | 19950516 |
| EP 682947 | B1 | 19970910 | | |
| R: AT, BE, CH,
DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
US 5643911 | | | | |
| | A | 19970701 | US 1995-441743 | 19950516 |
| AT 157871 | T | 19970915 | AT 1995-107372 | 19950516 |

| | | | | |
|-------------|----|----------|-----------------|------------|
| ES 2109752 | T3 | 19980116 | ES 1995-107372 | 19950516 |
| JP 08034734 | A | 19960206 | JP 1995-118404 | 19950517 |
| JP 2798005 | B2 | 19980917 | | |
| CA 2149691 | A1 | 19951120 | CA 1995-2149691 | 19950518 |
| CH 1116526 | A | 19960214 | CN 1995-106317 | 19950518 |
| | | | JP 1994-105367 | A 19940519 |

PRIORITY APPLN. INFO.:

MARPAT 124:76533

OTHER SOURCE(S):

AB A medicament for the therapeutic and prophylactic treatment of a disease caused by smooth muscle cell hyperplasia, comprises as an active ingredient an aminopyridazine derivative or a salt thereof, e.g. (R)-1-(cyclohexylethylamino)-4-phenylphthalazine (I). The compds. are useful for the treatment of post-percutaneous transluminal coronary angioplasty operative restenosis, stenosis after transplantation of organs such as heart, liver, kidney, and vessels, and post-percutaneous transluminal angioplasty operative restenosis. I inhibited the subendothelial hyperplasia in rat carotid arteries induced by removal of intima, by oral administration at the dose of 3 mg/kg.

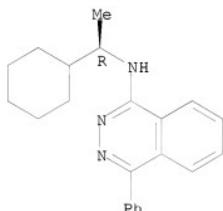
IT 149549-14-4P 172485-71-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (aminopyridazine derivs. for treatment of diseases caused by smooth muscle cell hyperplasia)

RN 149549-14-4 CAPLUS

CN 1-Phtalazinamine, N-[{(1R)-1-cyclohexylethyl}-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 172485-71-1 CAPLUS

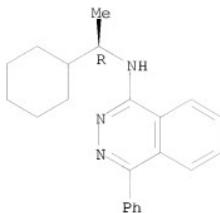
CN 1-Phtalazinamine, N-[{(1R)-1-cyclohexylethyl}-4-phenyl-,
(2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 149549-14-4

CMF C22 H25 N3

Absolute stereochemistry.



CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



L6 ANSWER 70 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1995:448803 CAPLUS
 DOCUMENT NUMBER: 122:281421
 ORIGINAL REFERENCE NO.: 122:51019a,51022a
 TITLE: Novel arylaminopyridazine-GABA receptor antagonists examined electrophysiologically in *Ascaris suum*
 AUTHOR(S): Martin, Richard J.; Sitamze, Jean-Marie; Duittoz, Anne H.; Wermuth, Camille G.
 CORPORATE SOURCE: Department of Preclinical Veterinary Sciences R.(D.) S.V.S., Summerhall, University of Edinburgh, Edinburgh, UK
 SOURCE: European Journal of Pharmacology (1995), 276(1/2), 9-19
 CODEN: EJPHAZ; ISSN: 0014-2999
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The structure-activity relationships of 35 novel derivs. of 2-(carboxypropyl)-3-amino-4-methyl-6-Ph pyridazine (SR 95103) were examined as γ -aminobutyric acid (GABA) antagonists in the flag preparation of the parasitic nematode, *A. suum*, using a two-microelectrode current-clamp technique. All but one of the potent antagonists displaced GABA dose-response curves to the right without reduction in the maximum response.

The dissociation consts. of the more potent competitive antagonists were described using a model which assumed that two mol. of GABA were required to open the ion channel but that only one mol. of antagonist acted on each ion channel. By exploring the structure-activity relationship, the potency of the antagonist was increased from a KB of 64 μ M for SR 95103 to a KB of 4.7 μ M for NCS 281-93 (2-(3-carboxypropyl)-3-amino-4-phenylpropyl-6-Ph pyridazine).

IT 23099-93-6, NCS 261-91

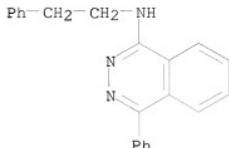
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(structure-activity relationships of arylaminopyridazine SR 95103
derivs. studied in Ascaris suum)

RN 23099-93-6 CAPLUS

CN 1-Phtalazinamine, 4-phenyl-N-(2-phenylethyl)- (CA INDEX NAME)



L6 ANSWER 71 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:323427 CAPLUS

DOCUMENT NUMBER: 120:323427

ORIGINAL REFERENCE NO.: 120:56905a,56908a

TITLE:

Synthesis and reactions of
1-(p-tolyl)-5,6,7,8-tetrabromo-3,2-benzoxazin-4-one
Amine, M. S.

AUTHOR(S): Fac. Sci., Benha Univ., Benha, Egypt

CORPORATE SOURCE: Asian Journal of Chemistry (1992), 4(4), 865-72

SOURCE: CODEN: AJCHEW; ISSN: 0970-7077

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



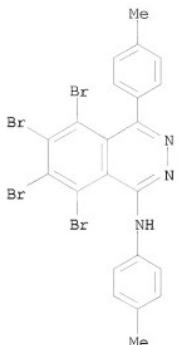
AB The title compound (I) was prepared and its reactions with nucleophiles was studied.

IT 143880-40-4P 143880-42-6P

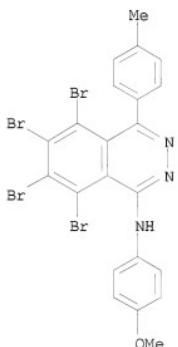
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 143880-40-4 CAPLUS

CN 1-Phtalazinamine, 5,6,7,8-tetrabromo-N,4-bis(4-methylphenyl)- (CA INDEX NAME)



RN 143880-42-6 CAPLUS
 CN 1-Phtalazinamine, 5,6,7,8-tetrabromo-N-(4-methoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



L6 ANSWER 72 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1993:649963 CAPLUS
 DOCUMENT NUMBER: 119:249963
 ORIGINAL REFERENCE NO.: 119:44601a, 44604a
 TITLE: 3,6-disubstituted pyridazine derivative blood platelet aggregation inhibitors
 INVENTOR(S): Iwase, Norimichi; Morinaka, Yasuhiro; Tamao, Yoshikuni; Kanayama, Toshiji; Yamada, Kumi
 PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan
 SOURCE: Eur. Pat. Appl., 115 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------------------------|-------------|
| EP 534443 | A1 | 19930331 | EP 1992-116413 | 19920924 |
| EP 534443 | B1 | 19981230 | GB, GR, IE, IT, LI, LU, NL, PT, SE | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | A | 19940517 | JP 1992-239545 | 19920908 |
| JP 06135938 | B2 | 19980325 | | |
| CA 2078699 | A1 | 19930327 | CA 1992-2078699 | 19920921 |
| AT 175200 | T | 19990115 | AT 1992-116413 | 19920924 |
| ES 2128333 | T3 | 19990516 | ES 1992-116413 | 19920924 |
| US 5324727 | A | 19940628 | US 1992-950947 | 19920925 |
| US 5462941 | A | 19951031 | US 1994-215426 | 19940321 |
| PRIORITY APPLN. INFO.: | | | JP 1991-247647 | A 19910926 |
| | | | JP 1991-335277 | A 19911218 |
| | | | JP 1992-239545 | A 19920908 |
| | | | US 1992-950947 | A3 19920925 |

OTHER SOURCE(S): MARPAT 119:249963

GI For diagram(s), see printed CA Issue.

AB The title compds. I [A = (un)substituted alkyl, C5-7 cycloalkyl, Ph, thiienyl, furyl, thiazolyl, etc.; B = (un)substituted (cyclic moiety-substituted methyl)amino groups; ring C = benzene ring], useful for the treatment and prevention of ischemic tissue diseases caused by blood platelet aggregation, are prepared. Thus, phthalic anhydride was reacted with cyclohexylmagnesium chloride, producing 2-(cyclohexanoyl)benzoic acid, which was sequentially reacted with NH₂NH₂, POCl₃, and D- α -phenylethylamine, producing the R enantiomer of phthalazine II, which demonstrated 97.1% rat blood platelet agglutination in-vitro inhibitory ratio [(i.e., [(agglutination degree when only a solvent was added (TC) - agglutination degree when a II medicinal solution was added)/(TC)]+100) at 3 + 10⁻⁷ M].

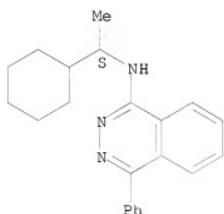
IT 149549-67-7P 149549-68-8P 149549-69-9P
149549-70-2P 149549-71-3P 149549-72-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and blood platelet aggregation inhibitory activity of)

RN 149549-67-7 CAPLUS

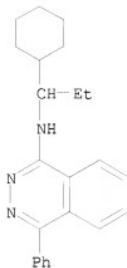
CN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-phenyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



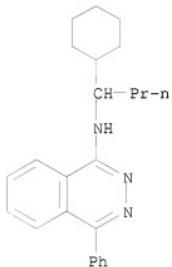
RN 149549-68-8 CAPLUS

CN 1-Phthalazinamine, N-(1-cyclohexylpropyl)-4-phenyl- (CA INDEX NAME)



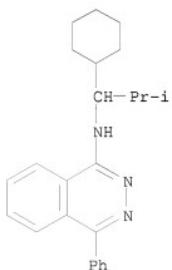
RN 149549-69-9 CAPLUS

CN 1-Phthalazinamine, N-(1-cyclohexylbutyl)-4-phenyl- (CA INDEX NAME)



RN 149549-70-2 CAPLUS

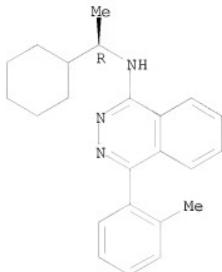
CN 1-Phthalazinamine, N-(1-cyclohexyl-2-methylpropyl)-4-phenyl- (CA INDEX NAME)



RN 149549-71-3 CAPLUS

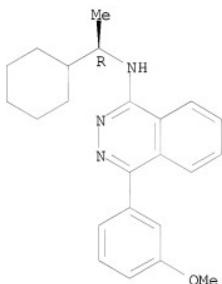
CN 1-Phtalazinamine, N-(1-cyclohexylethyl)-4-(2-methylphenyl)-, (R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



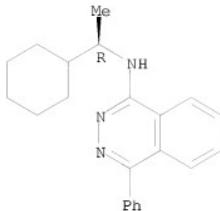
RN 149549-72-4 CAPLUS
CN 1-Phtalazinamine, N-(1-cyclohexylethyl)-4-(3-methoxyphenyl)-, (R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

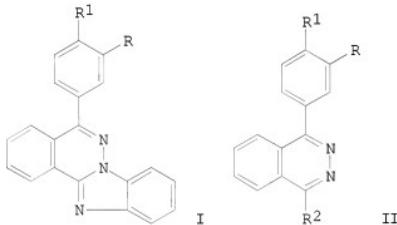


IT 149549-14-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
 (preparation and reaction of, in blood platelet aggregation inhibitor
 preparation)
RN 149549-14-4 CAPLUS
CN 1-Phtalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 73 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1993:580723 CAPLUS
 DOCUMENT NUMBER: 119:180723
 ORIGINAL REFERENCE NO.: 119:32307a,32310a
 TITLE: Synthesis and biological activity of benzimidazolo[2,3-a]phthalazines
 AUTHOR(S): Razvi, Mehboob; Ramalingam, T.
 CORPORATE SOURCE: Indian Inst. Chem. Technol., Hyderabad, 500 007, India
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1992), 31B(11), 788-9
 CODEN: IJSBDB; ISSN: 0376-4699
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 119:180723
 GI

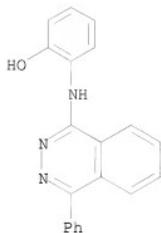


AB A new method of preparation of benzimidazolo[2,3-a]phthalazines (I; R = R1 = H, Cl; R = H, R1 = Me, Cl) is described by reacting 1-chloro-4-arylphthalazines (II; R2 = Cl) with 2-aminophenol to afford 1-N-(2'-hydroxyphenyl)amino-4-arylphtalazines (II; R2 = 2-HOC6H4NH) followed by their cyclodehydration employing PPA. These compds. have been screened for their antiinflammatory and antihypertensive activities.

IT 150252-50-9P 150252-51-0P 150252-52-1P
 150252-53-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclodehydration of)

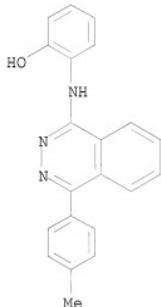
RN 150252-50-9 CAPLUS

CN Phenol, 2-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)



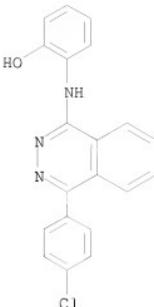
RN 150252-51-0 CAPLUS

CN Phenol, 2-[(4-(4-methylphenyl)-1-phthalazinyl)amino]- (CA INDEX NAME)



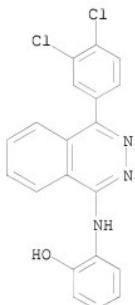
RN 150252-52-1 CAPLUS

CN Phenol, 2-[(4-(4-chlorophenyl)-1-phthalazinyl)amino]- (CA INDEX NAME)



RN 150252-53-2 CAPLUS

CN Phenol, 2-[{4-(3,4-dichlorophenyl)-1-phthalazinyl}amino]- (CA INDEX NAME)



L6 ANSWER 74 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:147524 CAPLUS

DOCUMENT NUMBER: 118:147524

ORIGINAL REFERENCE NO.: 118:25375a,25378a

TITLE: Synthesis of phthalazine and
1,2,4-triazolo[4,3-b]-4,5-benzopyridazine derivatives

AUTHOR(S): El-Bahaie, S.; El-Safy, M. A.; Yassin, F.

CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Zagazig, Egypt

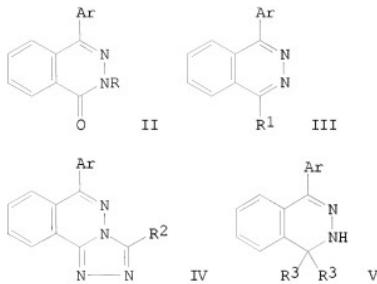
SOURCE: Egyptian Journal of Chemistry (1991), Volume Date
1990, 33(4), 381-6

CODEN: EGJCA3; ISSN: 0367-0422

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



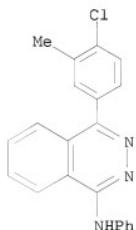
AB Cyclocondensation of 2-ArCOC₆H₄CO₂H (I, Ar = 4-Cl-3-MeC₆H₃ throughout) with RNHNH₂ (R = H, Ph, COPh, 2-HOC₆H₄CO) gave phthalazinone derivs. II. I reacted with semicarbazide and thiosemicarbazide to give II (R = CONH₂, CSNH₂). II (R = H) was alkylated to give phthalazines III (R 1 = OMe, OCH₂CO₂Et, OC₂Et). Further reaction of III (R1 = OCH₂CO₂Et, OC₂Et) gave III (R1 = OCH₂CONHNH₂, OCH₂CONHCH₂Ph, OCONHNHPH, etc.). Triazolophthalazines IV (R2 = Ph, CH₂Ph, 2-HOC₆H₄) and dialkylphthalazines V (R3 = Me, Et) were also prepared

IT 141123-40-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 141123-40-2 CAPLUS

CN 1-Phtalazinamine, 4-(4-chloro-3-methylphenyl)-N-phenyl- (CA INDEX NAME)



L6 ANSWER 75 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:124477 CAPLUS

DOCUMENT NUMBER: 118:124477

ORIGINAL REFERENCE NO.: 118:21581a, 21584a

TITLE: Synthesis of 4,5,6,7-tetraphenyl-8-(substituted)-3-(2H)-phthalazinone derivatives likely to possess antihypertensive activity

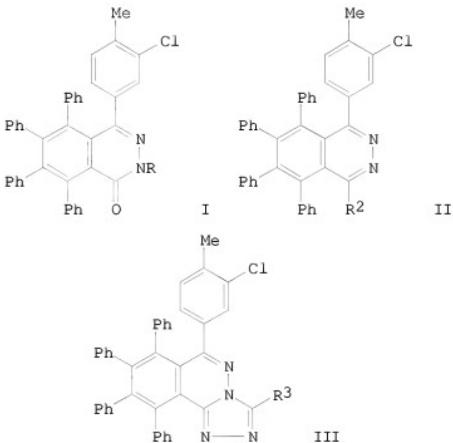
AUTHOR(S): Yassin, F. A.; Bayoumy, B. E.; El-Safty, M. A.; El-Farargy, A. F.

CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Zagazig, Egypt

SOURCE: Egyptian Journal of Chemistry (1991), Volume Date

1990, 33(2), 199-208
CODEN: EGJCA3; ISSN: 0367-0422

DOCUMENT TYPE:
LANGUAGE:
GI



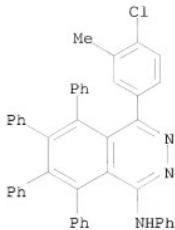
AB Title compds. I ($R = H$, Ph, Bz, 2-HOC₆H₄CO, CONH₂, CSNH₂, Me, CH₂COR₁, COR₁, C(CO₂Et):CHPh, C(CO₂H):CHPh, R₁ = OEt, OH, NHNNH₂, NHNHPh, NHPh, NHEt, NHC₆H₄OMe-4) were prepared by cyclocondensation of 2-HOC₆C₆H₄COCl-3,4 with hydrazine derivs., followed by alkylation, substitution, and condensation reactions. Chlorination of I ($R = H$) gave chloro derivative II, which underwent substitution with hydrazines and amines to give II ($R_2 = \text{NHNNH}_2$, NHNHPh , NHPh , NHMe) and cyclocondensation with acylhydrazines R₂CONHNH₂ ($R_3 = \text{Ph}$, PhCH₂, 2-HOC₆H₄) to give triazolobenzopyridazines III. I ($R = H$) underwent sulfuration with P₂S₅ to give the corresponding thione, which underwent reductive dimerization with copper bronze. Alkylation of I ($R = H$) with Grignard reagents gave 1,1-alkyl-1,2-dihydro derivs.

IT 129352-98-3P

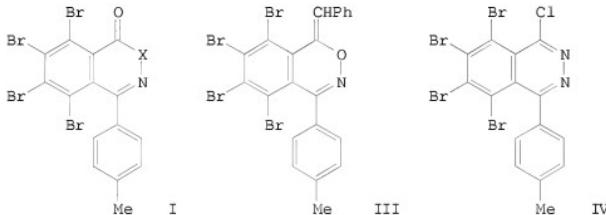
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 129352-98-3 CAPLUS

CN 1-Pthalazinamine, 4-(4-chloro-3-methylphenyl)-N,5,6,7,8-pentaphenyl- (CA INDEX NAME)



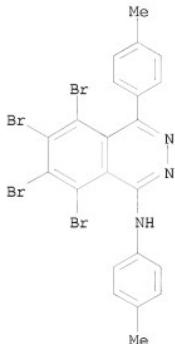
L6 ANSWER 76 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1992:591787 CAPLUS
 DOCUMENT NUMBER: 117:191787
 ORIGINAL REFERENCE NO.: 117:33127a,33130a
 TITLE: Synthesis and reactions of
 1-(p-tolyl)-5,6,7,8-tetrabromo-3,2-benzoxazin-4-one
 Amine, M. S.
 AUTHOR(S): Fac. Sci., Benha Univ., Benha, Egypt
 CORPORATE SOURCE: Asian Journal of Chemistry (1992), 4(4), 865-72
 SOURCE: CODEN: AJCHEW; ISSN: 0970-7077
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



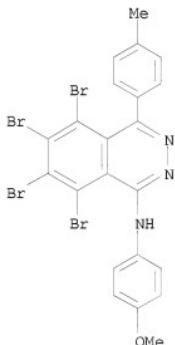
AB Reaction of the title compound (I; X = O) with benzylamine, p-toluidine, acetylhydrazide, salicylohydrazide, and with aromatic and aliphatic hydrocarbons under Friedel-Crafts and Grignard reaction conditions gave the oximes 2-RCOC₆Br₄(C₆H₄Me-4):NOH (II; R = NHCH₂Ph, NHC₆H₄Me-4, NNHHAc, NNHHCOOC₆H₄OH-2, C₆H₄Me-4, Ph, Et). 3-Phthalazin-4-one derivs. I (X = NNH₂, NC₆H₄OMe-4, NNHAc) were obtained by reaction of I (X = O) with p-anisidine, benzoylhydrazide, followed by cyclization of the resulting oximes II, and from the reaction of I (X = O) with hydrazine. Fusion of I (X = O) with NH₄OAc or PhCH₂CO₂H gave phthalazinones I (X = NH) and III, resp. Also, reaction of I (X = O) with P2S5 and active methylene compds. are described. The reaction of chlorophthalazine derivs. IV with nitrogen nucleophiles has been investigated.

IT 143880-40-4P 143880-42-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)
RN 143880-40-4 CAPLUS
CN 1-Phthalazinamine, 5,6,7,8-tetrabromo-N,4-bis(4-methylphenyl)- (CA INDEX NAME)



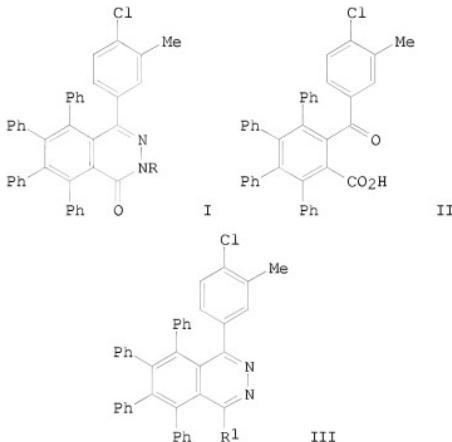
RN 143880-42-6 CAPLUS
CN 1-Phthalazinamine, 5,6,7,8-tetrabromo-N-(4-methoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



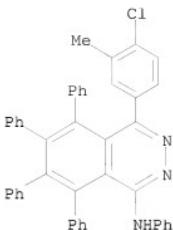
L6 ANSWER 77 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1992:255563 CAPLUS
DOCUMENT NUMBER: 116:255563
ORIGINAL REFERENCE NO.: 116:43335a,43338a
TITLE: Synthesis of 4,5,6,7-tetraphenyl-8-substituted-3(2H)-phthalazinone derivatives with potential antihypertensive activity
AUTHOR(S): Yassin, F. A.; El-Safty, M. A.; Bayoumy, B. E.; El

CORPORATE SOURCE:
SOURCE:
DOCUMENT TYPE:
LANGUAGE:
GI

Farargy, A. F.
Fac. Sci., Zagazig Univ., Zagazig, Egypt
Revue Roumaine de Chimie (1991), 36(1-3), 201-8
CODEN: RRCHAX; ISSN: 0035-3930
Journal
English



- AB Title phthalazinones I ($R = H, Ph, Bz, 2-COC_6H_4OH, CONH_2, CSNH_2$) were prepared by the cyclocondensation of benzoylbenzoic acid II with RNH_2 . O-Alkylation of I ($R = H$) with Me_2SO_4 , $ClCH_2CO_2Et$, and $ClCO_2Et$ gave phthalazine derivs. III ($R1 = OMe, OCH_2CO_2Et, OCO_2Et$). Reaction of I ($R = H$) with $PCl_5/POCl_3$ gave III ($R1 = Cl$). Reaction of III ($R1 = OCH_2CO_2Et, OCO_2Et, Cl$) with electrophiles, e.g., BzH and various nucleophiles, e.g., aromatic amines and hydrazines, is also reported.
- IT 129352-98-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
- RN 129352-98-3 CAPLUS
CN 1-Phthalazinamine, 4-(4-chloro-3-methylphenyl)-N,5,6,7,8-pentaphenyl- (CA INDEX NAME)



L6 ANSWER 78 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1992:235555 CAPLUS

DOCUMENT NUMBER: 116:235555

ORIGINAL REFERENCE NO.: 116:39901a,39904a

TITLE: Studies in the field of heterocyclic compounds.
Synthesis and behavior of

4-(4-chloro-3-methyl)phenyl-1-(2H)phthalazinone
towards some electrophiles and nucleophiles

AUTHOR(S): El-Safty, M. A.; El-Bahaei, S.; El-Hashash, M. A.;
El-Farargy, A.; Yasin, F.

CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Zagazig, Egypt

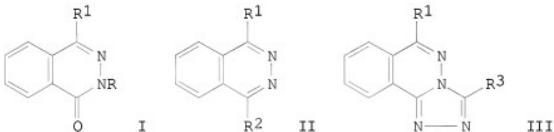
SOURCE: Revue Roumaine de Chimie (1991), 36(1-3), 187-95

CODEN: RRCHAX; ISSN: 0035-3930

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



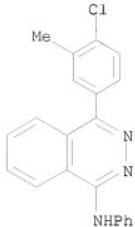
AB Phthalazinones I ($R = H, Ph, Bz, COC_6H_4OH-2, CONH_2, CSNH_2, R1 = 4\text{-chloro-3-methylphenyl}$) were prepared by the reaction of $2\text{-HO}_2CC_6H_4COR1$ with RNH_2H_2 . O-alkylation of I ($R = H, R1$ as above) with Me_2SO_4 , $C_1Cl_2CO_2Et$, and $C_1ClO_2CO_2Et$ gave phthalazine derivs. II ($R1$ as above, $R2 = OMe, OCH_2CO_2Et, OC_2OEt$). Reaction of II ($R2 = OCH_2CONH_2, OCONHPh$) with various carbon electrophiles and nucleophiles gave various phthalazine derivs., e.g., II ($R2 = OCH_2CONH_2, OCONHPh$). Chlorination of I ($R = H$) with $PCl_5/POCl_3$ gave II ($R2 = Cl$), which reacted with acylhydrazines $R3NHNNH_2$ ($R3 = Bz, PhCH_2CO, COC_6H_4OH-2$) to give triazole derivs. III ($R1$ as above).

IT 141123-40-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

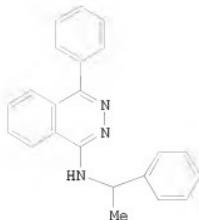
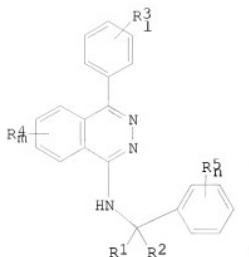
RN 141123-40-2 CAPLUS

CN 1-Phthalazinamine, 4-(4-chloro-3-methylphenyl)-N-phenyl- (CA INDEX NAME)



L6 ANSWER 79 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1992:41465 CAPLUS
 DOCUMENT NUMBER: 116:41465
 ORIGINAL REFERENCE NO.: 116:7121a,7124a
 TITLE: Preparation of 1-benzylamino-4-phenylphthalazines as platelet aggregation and cardiac infarct inhibitors
 INVENTOR(S): Iwase, Norimichi; Morinaka, Yasuhiro; Tamao, Yoshikuni; Kanayama, Toshiji
 PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan
 SOURCE: Eur. Pat. Appl., 27 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|--|--|--|
| EP 449203 | A1 | 19911002 | EP 1991-104763 | 19910326 |
| EP 449203 | B1 | 19941207 | | |
| R: AT, BE, CH,
ES 2068413
CA 2039258
US 5089494
JP 04211666 | DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
T3
A1
A
A | 19950416
19911001
19920218
19920803 | ES 1991-104763
CA 1991-2039258
US 1991-675259
JP 1991-62940 | 19910326
19910327
19910327
19910327 |
| PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI | MARPAT | 116:41465 | JP 1990-85447 | A 19900330 |



AB Title compds. [I; R1 = (hydroxy)alkyl; R2 = H, alkyl; R1R2 = (O-containing) C2-6 alkyne; R3, R4 = H, halo, alkyl, alkoxy; R5 = R3, CF₃, OH; adjacent R32, R42, R52 = O(CH₂)_pO; 1, m = 1, 2; n, p = 1-3], were prepared. Thus, a mixture of 1-chloro-4-phenylphthalazine, D- α -methylbenzylamine, and N-methylpyrrolidone was heated 3 h at 130-140° to give D-II. The latter at 3 mg/kg orally in rats gave 80.2% inhibition of collagen-induced platelet aggregation, and at 2 mg/kg orally in rats 81.1% inhibition of ligand-induced cardiac infarction.

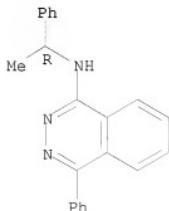
IT
 137998-70-0P 137998-71-1P 137998-72-2P
 137998-73-3P 137998-74-4P 137998-75-5P
 137998-76-6P 137998-77-7P 137998-79-9P
 137998-80-2P 137998-81-3P 137998-82-4P
 137998-83-5P 137998-84-6P 137998-85-7P
 137998-86-8P 137998-87-9P 137998-88-0P
 137998-89-1P 137998-90-4P 137998-91-5P
 137998-92-6P 137998-93-7P 137998-94-8P
 137998-95-9P 137998-96-0P 137998-97-1P
 137998-98-2P 137998-99-3P 137999-00-9P
 137999-01-0P 137999-02-1P 137999-03-2P
 137999-05-4P 137999-06-5P 137999-07-6P
 138023-89-9P 138023-90-2P 138126-46-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as blood platelet aggregation inhibitor and cardiac infarction inhibitor)

RN 137998-70-0 CAPLUS

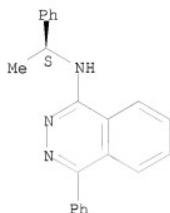
CN 1-Phthalazinamine, 4-phenyl-N-(1-phenylethyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

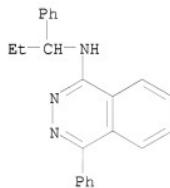


RN 137998-71-1 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-(1-phenylethyl)-, (S)- (9CI) (CA INDEX NAME)

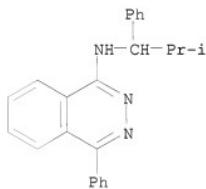
Absolute stereochemistry.



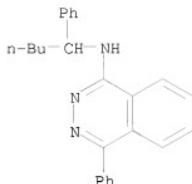
RN 137998-72-2 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-(1-phenylpropyl)- (CA INDEX NAME)



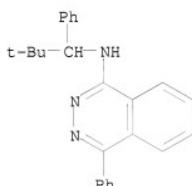
RN 137998-73-3 CAPLUS
CN 1-Phthalazinamine, N-(2-methyl-1-phenylpropyl)-4-phenyl- (CA INDEX NAME)



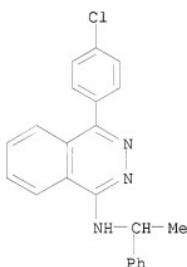
RN 137998-74-4 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-(1-phenylpentyl)- (CA INDEX NAME)



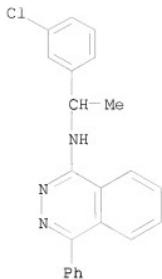
RN 137998-75-5 CAPLUS
CN 1-Phthalazinamine, N-(2,2-dimethyl-1-phenylpropyl)-4-phenyl- (CA INDEX NAME)



RN 137998-76-6 CAPLUS
CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(1-phenylethyl)- (CA INDEX NAME)

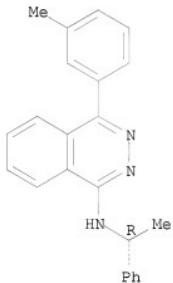


RN 137998-77-7 CAPLUS
CN 1-Phthalazinamine, N-[1-(3-chlorophenyl)ethyl]-4-phenyl- (CA INDEX NAME)



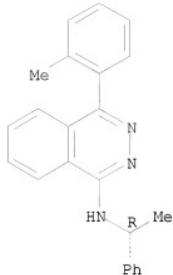
RN 137998-79-9 CAPLUS
CN 1-Phthalazinamine, 4-(3-methylphenyl)-N-(1-phenylethyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



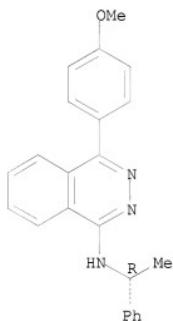
RN 137998-80-2 CAPLUS
CN 1-Phthalazinamine, 4-(2-methylphenyl)-N-(1-phenylethyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



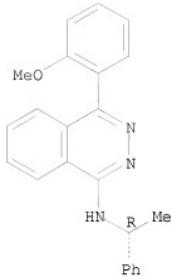
RN 137998-81-3 CAPLUS
CN 1-Phthalazinamine, 4-(4-methoxyphenyl)-N-(1-phenylethyl)-, (R)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



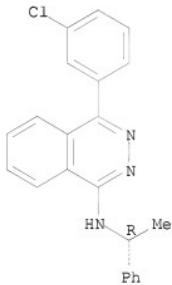
RN 137998-82-4 CAPLUS
CN 1-Phthalazinamine, 4-(2-methoxyphenyl)-N-(1-phenylethyl)-, (R)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



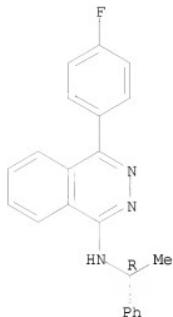
RN 137998-83-5 CAPLUS
CN 1-Phthalazinamine, 4-(3-chlorophenyl)-N-(1-phenylethyl)-, (R)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



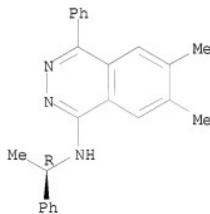
RN 137998-84-6 CAPLUS
CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-(1-phenylethyl)-, (R)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



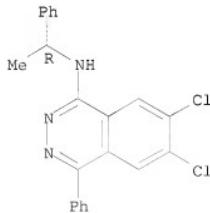
RN 137998-85-7 CAPLUS
 CN 1-Phtalazinamine, 6,7-dimethyl-4-phenyl-N-(1-phenylethyl)-, (R)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



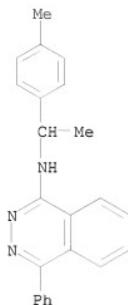
RN 137998-86-8 CAPLUS
 CN 1-Phtalazinamine, 6,7-dichloro-4-phenyl-N-(1-phenylethyl)-, (R)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

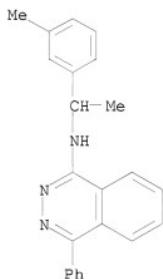


RN 137998-87-9 CAPLUS

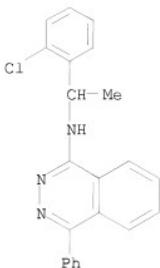
CN 1-Phthalazinamine, N-[1-(4-methylphenyl)ethyl]-4-phenyl- (CA INDEX NAME)



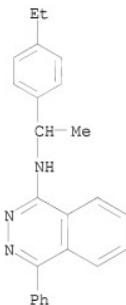
RN 137998-88-0 CAPLUS
CN 1-Phthalazinamine, N-[1-(4-methylphenyl)ethyl]-4-phenyl- (CA INDEX NAME)



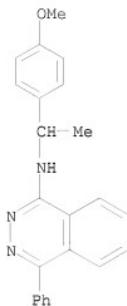
RN 137998-89-1 CAPLUS
CN 1-Phthalazinamine, N-[1-(4-chlorophenyl)ethyl]-4-phenyl- (CA INDEX NAME)



RN 137998-90-4 CAPLUS
CN 1-Phthalazinamine, N-[1-(4-ethylphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

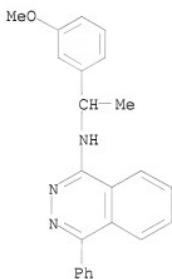


RN 137998-91-5 CAPLUS
CN 1-Phthalazinamine, N-[1-(4-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)



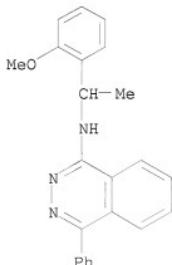
RN 137998-92-6 CAPLUS

CN 1-Phthalazinamine, N-[1-(3-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

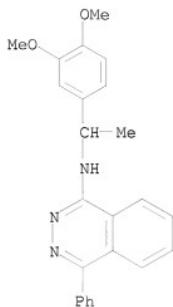


RN 137998-93-7 CAPLUS

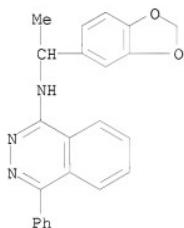
CN 1-Phthalazinamine, N-[1-(2-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)



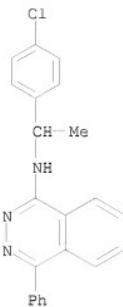
RN 137998-94-8 CAPLUS
CN 1-Phtalazinamine, N-[1-(3,4-dimethoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)



RN 137998-95-9 CAPLUS
CN 1-Phtalazinamine, N-[1-(1,3-benzodioxol-5-yl)ethyl]-4-phenyl- (CA INDEX NAME)

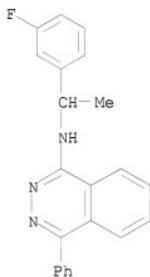


RN 137998-96-0 CAPLUS
CN 1-Phtalazinamine, N-[1-(4-chlorophenyl)ethyl]-4-phenyl- (CA INDEX NAME)



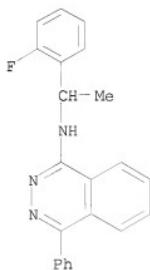
RN 137998-97-1 CAPLUS

CN 1-Phthalazinamine, N-[1-(3-fluorophenyl)ethyl]-4-phenyl- (CA INDEX NAME)

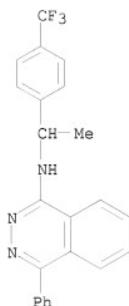


RN 137998-98-2 CAPLUS

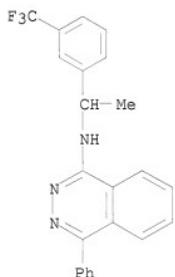
CN 1-Phthalazinamine, N-[1-(2-fluorophenyl)ethyl]-4-phenyl- (CA INDEX NAME)



RN 137998-99-3 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[1-[4-(trifluoromethyl)phenyl]ethyl]- (CA
INDEX NAME)

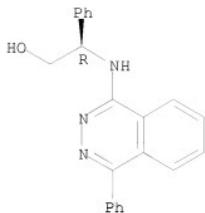


RN 137999-00-9 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[1-[3-(trifluoromethyl)phenyl]ethyl]- (CA
INDEX NAME)



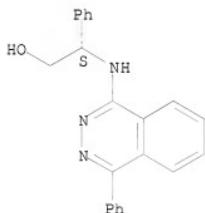
RN 137999-01-0 CAPLUS
CN Benzeneethanol, β -[(4-phenyl-1-phthalazinyl)amino]-, (R)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

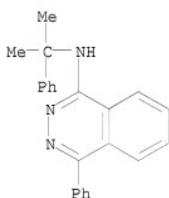


RN 137999-02-1 CAPLUS
 CN Benzeneethanol, β -[(4-phenyl-1-phthalazinyl)amino]-, (S)- (9CI) (CA INDEX NAME)

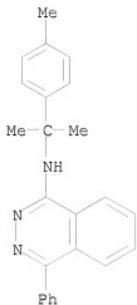
Absolute stereochemistry.



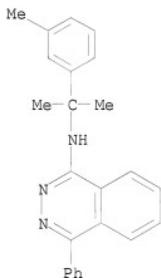
RN 137999-03-2 CAPLUS
 CN 1-Phthalazinamine, N-(1-methyl-1-phenylethyl)-4-phenyl- (CA INDEX NAME)



RN 137999-05-4 CAPLUS
 CN 1-Phthalazinamine, N-[1-methyl-1-(4-methylphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

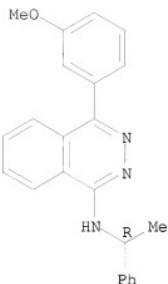


RN 137999-06-5 CAPLUS
CN 1-Phthalazinamine, N-[1-methyl-1-(3-methylphenyl)ethyl]-4-phenyl- (CA INDEX NAME)



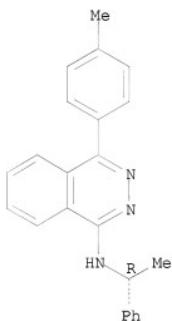
RN 137999-07-6 CAPLUS
CN 1-Phthalazinamine, 4-(3-methoxyphenyl)-N-(1-phenylethyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

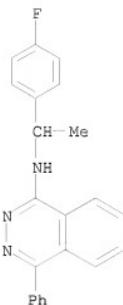


RN 138023-89-9 CAPLUS
CN 1-Phthalazinamine, 4-(4-methylphenyl)-N-(1-phenylethyl)-, (R)- (9CI) (CA INDEX NAME)

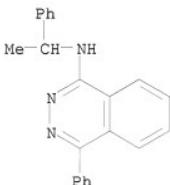
Absolute stereochemistry.



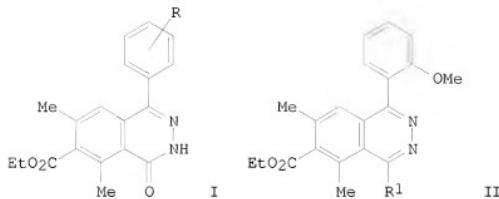
RN 138023-90-2 CAPLUS
CN 1-Phthalazinamine, N-[1-(4-fluorophenyl)ethyl]-4-phenyl- (CA INDEX NAME)



RN 138126-46-2 CAPLUS
 CN 1-Phthalazinamine, 4-phenyl-N-(1-phenylethyl)- (CA INDEX NAME)



L6 ANSWER 80 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1991:679936 CAPLUS
 DOCUMENT NUMBER: 115:279936
 ORIGINAL REFERENCE NO.: 115:47571a,47574a
 TITLE: Studies on antiatherosclerotic agents. Synthesis and inhibitory activities on platelet aggregation of 4-aryl derivatives of 7-ethoxycarbonyl-6,8-dimethyl-1(2H)-phthalazinone
 AUTHOR(S): Eguchi, Yukuo; Sato, Yuko; Sekizaki, Satomi; Ishikawa, Masayuki
 CORPORATE SOURCE: Inst. Med. Dent. Eng., Tokyo Med. Dent. Univ., Tokyo, 101, Japan
 SOURCE: Chemical & Pharmaceutical Bulletin (1991), 39(8), 2009-15
 DOCUMENT TYPE: CPBTAL; ISSN: 0009-2363
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 115:279936
 GI



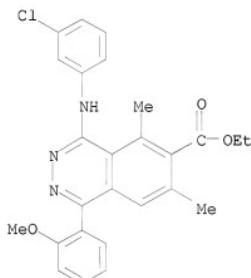
AB Phthalazine derivs., e.g. I ($R = H$, 2-, 3-, 4-Me, 2-, 4-OMe, 2-, 4-Cl, 2-, 4-OCH₂Ph, etc.) and II ($R1 = OEt$, SET, 1-piperidinyl, NHC₆H₄Cl-3, C.tpbond.CPh, etc.), were prepared and evaluated as inhibitors of arachidonic acid (AA) and ADP induced platelet aggregation. Thus, 4-ethoxycarbonyl-3,5-dimethylphthalic anhydride reacted with (RC₆H₄)₂Cd and cyclized with H₂NNH₂ to give I. Some compds. had considerable inhibitory activity against AA-induced platelet aggregation. Structure activity relationships were also examined

IT 137207-95-5P 137207-96-6P 137207-97-7P
137207-98-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and platelet antiaggregating activity of)

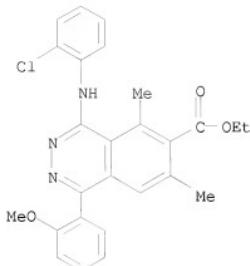
RN 137207-95-5 CAPLUS

CN 6-Phthalazinecarboxylic acid, 4-[(3-chlorophenyl)amino]-1-(2-methoxyphenyl)-5,7-dimethyl-, ethyl ester (CA INDEX NAME)



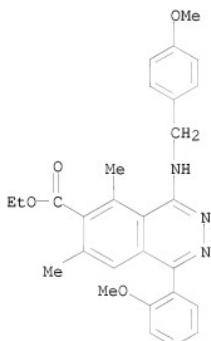
RN 137207-96-6 CAPLUS

CN 6-Phthalazinecarboxylic acid, 4-[(2-chlorophenyl)amino]-1-(2-methoxyphenyl)-5,7-dimethyl-, ethyl ester (CA INDEX NAME)



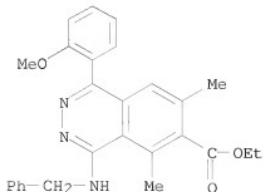
RN 137207-97-7 CAPLUS

CN 6-Phthalazinecarboxylic acid, 1-(2-methoxyphenyl)-4-[(4-methoxyphenyl)methyl]amino]-5,7-dimethyl-, ethyl ester (CA INDEX NAME)

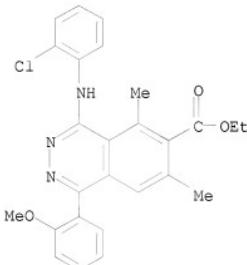


RN 137207-98-8 CAPLUS

CN 6-Phthalazinecarboxylic acid, 1-(2-methoxyphenyl)-5,7-dimethyl-4-[(phenylmethyl)amino]-, ethyl ester (CA INDEX NAME)



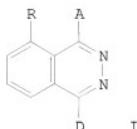
IT 137500-39-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 137500-39-1 CAPLUS
CN 6-Phtalazinecarboxylic acid, 4-[(2-chlorophenyl)amino]-1-(2-methoxyphenyl)-5,7-dimethyl-, ethyl ester, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L6 ANSWER 81 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:481808 CAPLUS
DOCUMENT NUMBER: 115:81808
ORIGINAL REFERENCE NO.: 115:13915a,13918a
TITLE: Organic nonlinear optical material for laser wavelength conversion
INVENTOR(S): Uchino, Nobuhiko; Okazaki, Masaki; Matsuo, Yasushi; Okazaki, Yoji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|----------------------------------|----------------------|
| -----
JP 03055529 | A | 19910311 | JP 1989-191627
JP 1989-191627 | 19890725
19890725 |
| PRIORITY APPLN. INFO.: | | | | |
| OTHER SOURCE(S): | MARPAT | 115:81808 | | |
| GI | | | | |



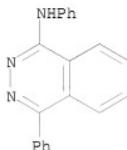
AB The title material consists of a compound I (R = H, an electron-acceptor group; A = an electron-acceptor group; D = an electron-donor group).

IT 10132-04-4

RL: TEM (Technical or engineered material use); USES (Uses)
(nonlinear optical material, for laser wavelength conversion)

RN 10132-04-4 CAPLUS

CN 1-Phthalazinamine, N,4-diphenyl- (CA INDEX NAME)



L6 ANSWER 82 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:122235 CAPLUS

DOCUMENT NUMBER: 114:122235

ORIGINAL REFERENCE NO.: 114:20821a,20824a

TITLE: Synthesis and reactions of new phthalazine derivatives

AUTHOR(S): Badawy, Mohamed A.; Abou-Hadeed, Khaled; Abdel-Hady, Sayed A.

CORPORATE SOURCE: Fac. Sci., Cairo Univ., Cairo, Egypt

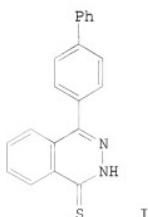
SOURCE: Sulfur Letters (1990), 12(1-2), 1-10

CODEN: SULED2; ISSN: 0278-6117

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB 4-(4-Phenylphenyl)-1(2H)-phthalazinethione (I) was prepared by treatment of the oxo analog with Lawesson's reagent. A study of the reactions of I with alkylating agents, NH₄OAc, NH₂OH and with a variety of other reagents has been undertaken.

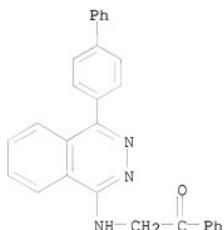
IT 132555-07-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrolysis of)

RN 132555-07-8 CAPLUS

CN Ethanone, 2-[(4-[1,1'-biphenyl]-4-yl-1-phthalazinyl)amino]-1-phenyl- (CA INDEX NAME)



L6 ANSWER 83 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:6413 CAPLUS

DOCUMENT NUMBER: 114:6413

ORIGINAL REFERENCE NO.: 114:1263a,1266a

TITLE: Behavior of 4-(4-bromo-3-methylphenyl)-1(2H)-phthalazinone towards some nucleophiles and electrophiles

AUTHOR(S): Salem, Moneer A.; El-Gendy, A. M.; El-Nagdy, S. I.

CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt

SOURCE: Revue Roumaine de Chimie (1989), 34(9-10), 1963-71

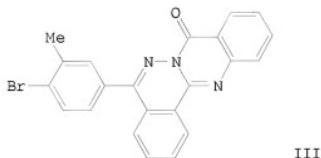
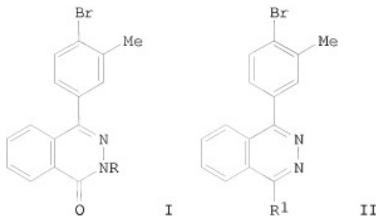
CODEN: RRCHAX; ISSN: 0035-3930

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 114:6413

GI



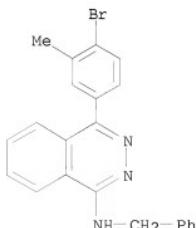
AB Phthalazinones I ($R = H, Ph, CONH_2$) were prepared in 55-61% yields by treating $4,3\text{-BrMeC}_6\text{H}_3\text{COOC}_6\text{H}_4\text{CO}_2\text{H-2}$ with hydrazines and $H_2\text{NCONHNH}_2\cdot\text{HCl}$. Treating I ($R = H$) with $\text{PCl}_5/\text{POCl}_3$ gave chlorophthalazine II ($R_1 = \text{Cl}$), which reacted with NaNH_2 , PhCH_2NH_2 , and N_2H_4 to give II ($R_1 = \text{NH}_2$, NHCH_2Ph , NHNH_2). Reaction of anthranilic acid with I ($R = H$) gave 53% phthalazinoquinazoline III. Reaction of I ($R = H$) with MeI , Ac_2O , or acid chlorides gave I ($R = \text{Me}$, Ac , COCH_2Cl , Bz , $\text{COC}_6\text{H}_4\text{Cl-4}$). Condensation reaction of aromatic aldehydes with I ($R = \text{Ac}$) gave the corresponding Claisen products. I ($R = H$) added to $\text{CH}_2:\text{CHCN}$ in pyridine to give 47% I ($R = \text{CH}_2\text{CH}_2\text{CN}$).

IT 130968-05-7P

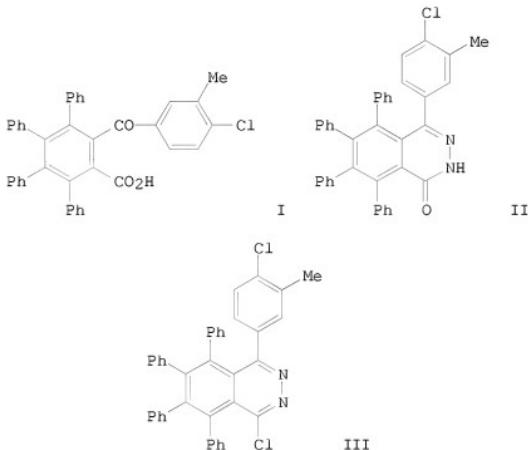
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 130968-05-7 CAPLUS

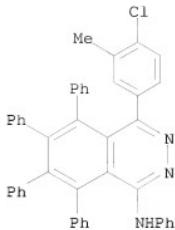
CN 1-Phthalazinamine, 4-(4-bromo-3-methylphenyl)-N-(phenylmethyl)- (CA INDEX NAME)



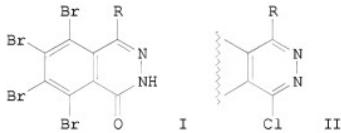
DOCUMENT NUMBER: 113:132113
 ORIGINAL REFERENCE NO.: 113:22447a,22450a
 TITLE: Synthesis of 4,5,6,7-tetraphenyl-8-(substituted)-3(2H)-
 phthalazinone derivatives likely to posses
 antihypertensive activity
 AUTHOR(S): Yassin, F. A.; Bayoumy, B. E.; El-Farargy, A. F.
 CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Zagazig, Egypt
 SOURCE: Bulletin of the Korean Chemical Society (1990), 11(1),
 7-10
 DOCUMENT TYPE: CODEN: BKCSDE; ISSN: 0253-2964
 LANGUAGE: Journal
 GI English



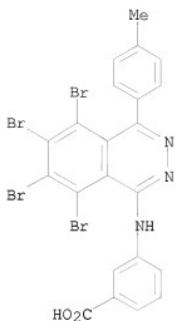
- AB** The interaction of tetraphenylphthalic anhydride with o-chlorotoluene under Friedel-Craft conditions gives 2-(4-chloro-3-methylphenyl)benzoyl-3,4,5,6-tetraphenylbenzoic acid (I), which on reaction with hydrazine derivs. gave phthalazinones, e.g., II. The behavior of (II) towards carbon electrophiles and carbon nucleophiles was investigated. The chlorophthalazinone (III) was also synthesized by treating II with PCl₅/POCl₃. The behavior of III towards nitrogen, and oxygen nucleophiles is also described.
IT 129352-98-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
RN 129352-98-3 CAPLUS
CN 1-Phthalazinamine, 4-(4-chloro-3-methylphenyl)-N,5,6,7,8-pentaphenyl- (CA INDEX NAME)



L6 ANSWER 85 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1990:198274 CAPLUS
 DOCUMENT NUMBER: 112:198274
 ORIGINAL REFERENCE NO.: 112:33521a,33524a
 TITLE: Behavior of 4-(*p*-tolyl)-5,6,7,8-tetrabromo-1(2H)-
 phthalazinone towards some nucleophiles
 AUTHOR(S): El-Sawy, A. A.; Donia, S. G.; Essawy, S. A.; Eissa, A.
 M. F.
 CORPORATE SOURCE: Fac. Sci., Benha Univ., Benha, Egypt
 SOURCE: Journal of the Chemical Society of Pakistan (1989),
 11(2), 111-16
 DOCUMENT TYPE: CODEN: JCSPDF; ISSN: 0253-5106
 LANGUAGE: Journal
 English
 OTHER SOURCE(S): CASREACT 112:198274
 GI

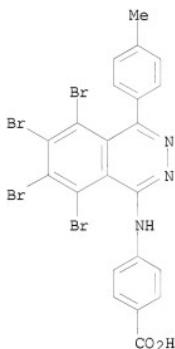


- AB The reactivity of title phthalazinone I ($R = p$ -tolyl), which contains two reaction sites (C:O and C:N), was investigated for reaction with alkyl- or aralkylmagnesium halide under Grignard reaction conditions. Treatment of I with $POCl_3/PCl_5$ afforded chloro derivative II in which the chlorine atom is activated by the heteroyl moiety. Therefore II readily underwent nucleophilic substitution reactions.
- IT 126764-79-2P 126764-80-5P 126764-82-7P
 126764-83-8P 126764-84-9P 126764-85-0P
- RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
- RN 126764-79-2 CAPLUS
- CN Benzoic acid, 3-[5,6,7,8-tetrabromo-4-(4-methylphenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)



RN 126764-80-5 CAPLUS

CN Benzoic acid, 4-[5,6,7,8-tetrabromo-4-(4-methylphenyl)-1-phthalazinyl]amino]- (CA INDEX NAME)



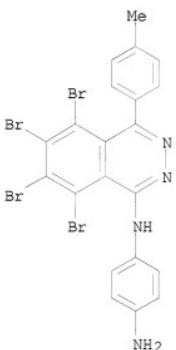
RN 126764-82-7 CAPLUS

CN 1,2-Benzenediamine, N1-[5,6,7,8-tetrabromo-4-(4-methylphenyl)-1-phthalazinyl]- (CA INDEX NAME)



RN 126764-83-8 CAPLUS

CN 1,4-Benzenediamine, N1-[5,6,7,8-tetrabromo-4-(4-methylphenyl)-1-phthalazinyl]- (CA INDEX NAME)

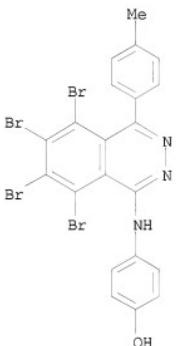


RN 126764-84-9 CAPLUS

CN Phenol, 2-[{5,6,7,8-tetrabromo-4-(4-methylphenyl)-1-phthalazinyl}amino]- (CA INDEX NAME)



RN 126764-85-0 CAPLUS
 CN Phenol, 4-[{5,6,7,8-tetrabromo-4-(4-methylphenyl)-1-phthalazinyl}amino]-(CA INDEX NAME)



L6 ANSWER 86 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1990:16055 CAPLUS
 DOCUMENT NUMBER: 112:16055
 ORIGINAL REFERENCE NO.: 112:2729a,2732a
 TITLE: Role of selective cyclic GMP phosphodiesterase inhibition in the myorelaxant actions of M&B 22,948, MY-5445, vinpocetine and 1-methyl-3-isobutyl-8-(methylamino)xanthine
 AUTHOR(S): Souness, John E.; Brazdil, Roman; Diocee, Baljeet K.; Jordan, Roy
 CORPORATE SOURCE: Res. Inst., Rhone-Poulenc Ltd., Dagenham/Essex, RM10 7XS, UK
 SOURCE: British Journal of Pharmacology (1989), 98(3), 725-34
 CODEN: BJPCBM; ISSN: 0007-1188
 DOCUMENT TYPE: Journal

LANGUAGE:

English

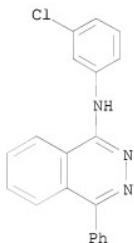
AB The mechanism by which M&B 22,948, MY-5445, vinpocetine, and 1-methyl-3-isobutyl-8-(methylamino)xanthine (MIMAX), which have been described as selective cGMP phosphodiesterase (PDE) inhibitors, relax rat aorta was investigated. Three cyclic nucleotide PDEs were identified in the soluble fraction of rat aorta; a Ca²⁺-insensitive form exhibiting substrate selectivity for cGMP (cGMP PDE), a Ca²⁺/calmodulin-stimulated form which also preferentially hydrolyzed cGMP (Ca²⁺ PDE), and a form demonstrating substrate selectivity for cAMP (cAMP PDE). M&B 22,948 and MIMAX inhibited cGMP PDE ($K_i = 0.16$ and $0.43 \mu\text{M}$, resp.) and Ca²⁺ PDE ($K_i = 9.9$ and $0.55 \mu\text{M}$, resp.), but exhibited weak activity against cAMP PDE ($K_i = 249$ and $42 \mu\text{M}$, resp.). MY-5445 selectivity inhibition cGMP PDE ($K_i = 1.3 \mu\text{M}$) and vinpocetine selectively inhibited Ca²⁺ PDE ($K_i = 14 \mu\text{M}$). M&B 22,948 and MIMAX induced concentration-dependent increases in the accumulation of cGMP, but not cAMP, in rat aorta pieces. These effects were greatly reduced by endothelial denudation and by methylene blue ($5 \mu\text{M}$) which blocks the actions of endothelium-derived relaxant factor. MY-5445 and vinpocetine had no effect on rat aorta cGMP or cAMP accumulation. All 4 compds. caused concentration-related relaxation of 5-hydroxytryptamine ($10 \mu\text{M}$) contracted, endothelium-intact rat aorta, the effects of M&B 22,948 and MIMAX being greatly reduced by methylene blue ($5 \mu\text{M}$). Methylene blue also caused 10- and 100-fold rightward shifts in the concentration-response curves of MY-5445 and vinpocetine, resp. The results are consistent with the smooth muscle relaxant actions of M&B 22,948 and MIMAX, but not vinpocetine and MY-5445, being mediated through a mechanism involving inhibition of cGMP hydrolysis.

IT 78351-75-4, MY 5445

RL: BIOL (Biological study)
(vasodilation by, cGMP phosphodiesterase inhibition in)

RN 78351-75-4 CAPLUS

CN 1-Phtalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 87 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1989:407325 CAPLUS

DOCUMENT NUMBER: 111:7325

ORIGINAL REFERENCE NO.: 111:1403a,1406a

TITLE: Synthesis and reactions of

4-(3',4'-dichlorophenyl)-1(2H)-phthalazinone

AUTHOR(S): El-Hashash, Maher A.; El-Nagdy, Sayed I.; Soliman, Ahmed Y.

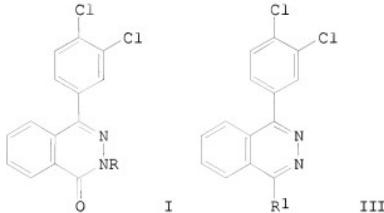
CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt

SOURCE: Egyptian Journal of Chemistry (1987), Volume Date
1986, 29(5), 529-37

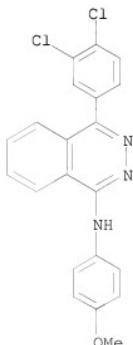
CODEN: EGJCA3; ISSN: 0367-0422

DOCUMENT TYPE:
LANGUAGE:
OTHER SOURCE(S):
GI

Journal
English
CASREACT 111:7325

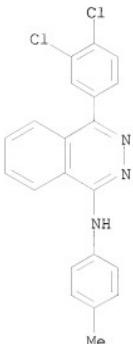


- AB The phthalazinones I ($R = H, Ph, Me, Ac, Bz, COC_6H_4NO_2-4, SO_2Ph, CONH_2$), were prepared by the reaction of α -(3,4-dichlorobenzoyl)benzoic acid with RNH_2 . Reaction of I ($R = H$) (II), with electrophilic reagents gave N-alkylated or acylated derivs. and O-alkylated derivs. depending upon nature of catalyst. Behavior of 1-O-carbethoxymethyl derivative III ($R_1 = OCH_2CO_2Et$) of II towards aromatic aldehydes was as investigated. II reacted with $POCl_3/PCl_5$ gave chloro derivative III ($R_1 = Cl$). Reaction of IV with aromatic amines and sodium methoxide gave aryl aminophthalazines III ($R_1 = NH_2C_6H_4R_2; R_2 = Me, OMe$).
- IT 121004-96-4P 121020-05-1P
- RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and condensation reactions with aromatic amines)
- RN 121004-96-4 CAPLUS
- CN 1-Phthalazinamine, 4-(3,4-dichlorophenyl)-N-(4-methoxyphenyl)- (CA INDEX NAME)



- RN 121020-05-1 CAPLUS
- CN 1-Phthalazinamine, 4-(3,4-dichlorophenyl)-N-(4-methoxyphenyl)- (CA INDEX

NAME)



L6 ANSWER 88 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1987:168781 CAPLUS

DOCUMENT NUMBER: 106:168781

ORIGINAL REFERENCE NO.: 106:27269a,27272a

TITLE: Cyclic nucleotide phosphodiesterase inhibitors prevent aggregation of human platelets by raising cyclic AMP and reducing cytoplasmic free calcium mobilization

AUTHOR(S): Lanza, Francois; Beretz, Alain; Stierle, Anita; Corre, Gilles; Cazenave, Jean Pierre

CORPORATE SOURCE: Unite Biol. Pharmacol. Interact. Sang Vaisseaux Biomater., Cent. Reg. Transfus. Sang, Strasbourg, Fr.

SOURCE: Thrombosis Research (1987), 45(5), 477-84

CODEN: THBRAA; ISSN: 0049-3848

DOCUMENT TYPE: Journal

LANGUAGE: English

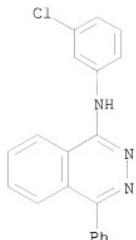
AB Cyclic nucleotide phosphodiesterase (PDE) [9040-59-9] inhibitors (HL-725 [78416-81-6], RO 15-2041 [77448-87-4], cilostamide [68550-75-4], quercetin [117-39-5], and MY-5445 [78351-75-4]) potently inhibit human platelet aggregation induced by ADP. In parallel, PDE inhibitors inhibit the increase in cytoplasmic free Ca²⁺ evoked by ADP, as measured with the fluorescent probe quin 2. The inhibition of ADP-induced aggregation and rise in [Ca²⁺]_i is potentiated by PGEl which stimulates adenylate cyclase and is inhibited by adrenaline which inhibits adenylate cyclase. PDE inhibitors increase human platelet cAMP [60-92-4] levels in the presence of low concns. of PGEl. It is suggested that PDE inhibitors prevent platelet aggregation by raising cAMP levels and by subsequent inhibition of cytoplasmic free Ca²⁺ mobilization.

IT 78351-75-4, MY-5445

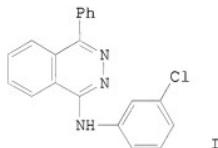
RL: BIOL (Biological study)
(platelet aggregation of human inhibition by, cAMP and calcium in relation to)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 89 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1984:150783 CAPLUS
 DOCUMENT NUMBER: 100:150783
 ORIGINAL REFERENCE NO.: 100:22845a,22848a
 TITLE: Effect of 1-(3-chloroanilino)-4-phenylphthalazine (MY-5445), a specific inhibitor of cyclic GMP phosphodiesterase, on human platelet aggregation
 Hagiwara, Masatoshi; Endo, Toyoshi; Kanayama, Toshiji;
 Hidaka, Hiroyoshi
 AUTHOR(S):
 CORPORATE SOURCE: Dep. Pharmacol., Mie Univ. Sch. Med., Tsu, 514, Japan
 SOURCE: Journal of Pharmacology and Experimental Therapeutics (1984), 228(2), 467-71
 DOCUMENT TYPE: CODEN: JPETAB; ISSN: 0022-3565
 LANGUAGE: English
 GI



AB The concns. of MY-5445 (I) [78351-75-4] producing 50% inhibition of human platelet aggregation induced by 3 μ M ADP, 3 μ g/mL of collagen, and 100 μ g/mL of arachidonic acid were 0.07, 0.02 and 0.17 μ M, resp. Addition of MY-5445 significantly elevated cyclic GMP [7665-99-8] content in human platelets but had no effect on cyclic AMP [60-92-4] content, suggesting that the drug affects principally the cyclic GMP metabolism in the platelet. Although MY-5445 had no effect on either adenylate cyclase [9012-42-4] or guanylate cyclase [9054-75-5] activity, it inhibited specifically human platelet cyclic GMP phosphodiesterase [9068-52-4] which was separated from cyclic AMP phosphodiesterase by diethylaminoethyl-cellulose column chromatog. The inhibitory effect of MY-5445 on cyclic GMP phosphodiesterase was also demonstrated by direct binding of the enzyme to MY-5445 coupled Sepharose, which was a useful tool for purifying the cyclic GMP phosphodiesterase from human platelet. These results would suggest that MY-5445 inhibits human platelet

aggregation by increasing cyclic GMP content and that it provides a useful probe for elucidating the role of cyclic GMP in platelet aggregation.

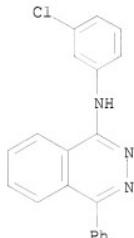
IT 78351-75-4

RL: BIOL (Biological study)

(blood platelet aggregation response to, of human, cGMP in relation to)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 90 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1984:132553 CAPLUS

DOCUMENT NUMBER: 100:132553

ORIGINAL REFERENCE NO.: 100:20061a,20064a

TITLE: Selective inhibitors of three forms of cyclic nucleotide phosphodiesterase - basic and potential clinical applications

AUTHOR(S): Hidaka, Hiroyoshi; Endo, Toyoshi

CORPORATE SOURCE: Sch. Med., Mie Univ., Edobashi, 514, Japan

SOURCE: Advances in Cyclic Nucleotide and Protein Phosphorylation Research (1984), 16, 245-59

CODEN: ACNRAY; ISSN: 0747-7767

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Human platelets contain 3 distinct forms of cyclic nucleotide phosphodiesterase (PDE) which can be separated by DEAE-cellulose inhibitors on the function of various tissues (platelets, blood vessels, etc.) is dependent on both the tissue distribution of drugs and each form of PDE. It appears that multiforms of PDE are present in various amts. in the tissue. A specific inhibitor for each form of PDE could pave the way for basic research on PDE regulation and provide for eventual therapeutic application to control abnormal function.

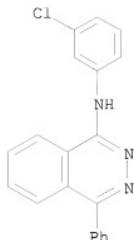
IT 78351-75-4

RL: BIOL (Biological study)

(cyclic nucleotide phosphodiesterase inhibition by)

RN 78351-75-4 CAPLUS

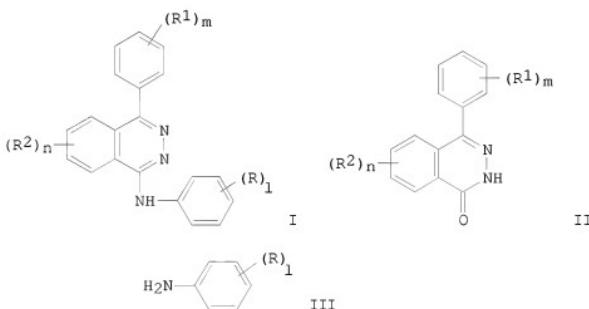
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 91 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1983:126138 CAPLUS
 DOCUMENT NUMBER: 98:126138
 ORIGINAL REFERENCE NO.: 98:19227a,19230a
 TITLE: 4-Phenylphthalazines
 PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------|--------|----------------------|--------------------------------|----------------------|
| -----
JP 57167974
JP 03029791 | A
B | 19821016
19910425 | JP 1981-52446
JP 1981-52446 | 19810409
19810409 |

PRIORITY APPLN. INFO.:
 GI



AB The title compds. I ($R = \text{alkyl, alkoxy, halo, alkoxycarbonyl, cyano, etc.}$, $l = 0-3$; $R_2 = \text{alkyl, alkoxy, halo, alkoxycarbonyl, CO}_2\text{H, alkylcarbonyl, OH, CF}_3$, $m, n = 0-3$) were prepared by reaction of II with III

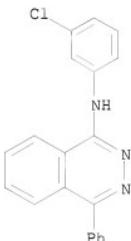
in the presence of P or S compds. Thus, refluxing a mixture of 22.2 g 4-phenyl-1-(2H)-phthalazinone, 16.6 g m-CIC₆H₄NH₂, 50 mL toluene, and 19.9 g POCl₃ for 2 h gave, after treatment with CHCl₃ and 10% aqueous NaOH, 24.9 g 1-(3-chloroanilino)-4-phenylphthalazine.

IT 78351-75-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 92 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1982:6748 CAPLUS

DOCUMENT NUMBER: 96:6748

ORIGINAL REFERENCE NO.: 96:1227a,1230a

TITLE: 4-Phenylphthalazine derivatives useful for inhibiting blood platelet aggregation

INVENTOR(S): Hayashi, Eisaku; Oishi, Etsuo; Morinaka, Yasuhiro;
Mori, Motokuni; Kanayama, Toshiji

PATENT ASSIGNEE(S): Mitsubishi Yuka Pharmaceutical Co., Ltd., Japan
SOURCE: Fr. Demande, 45 pp.

DOCUMENT TYPE: Patent

LANGUAGE: French

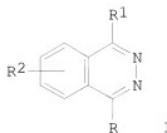
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| FR 2468593 | A1 | 19810508 | FR 1980-21530 | 19801008 |
| JP 56053660 | A | 19810513 | JP 1979-130434 | 19791009 |
| JP 62042901 | B | 19870910 | | |
| JP 57048972 | A | 19820320 | JP 1980-124644 | 19800910 |
| JP 63034871 | B | 19880712 | | |
| GB 2063249 | A | 19810603 | GB 1980-30906 | 19800925 |
| PRIORITY APPLN. INFO.: | | | JP 1979-130434 | A 19791009 |
| | | | JP 1980-124644 | A 19800910 |
| | | | | |

OTHER SOURCE(S): CASREACT 96:6748; MARPAT 96:6748

GI



AB 4-Phenylphthalazines I (R = optionally substituted PhNH, PhO; R1 = optionally substituted Ph; R2 = alkyl, alkoxy, halogen, alkoxy carbonyl, CO2H, acyl, OH, CF3) were prepared. Thus, I (R = Cl, R1 = Ph, R2 = H) was treated with 4-MeC6H4NH2 to give 29% I (R = 4-MeC6H4NH, R1 = Ph, R2 = H) which at 3 + 10-6M gave 56.5% inhibition of blood platelet aggregation.

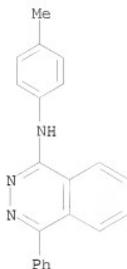
IT

| | | |
|-------------|-------------|-------------|
| 78351-61-8P | 78351-62-9P | 78351-63-0P |
| 78351-64-1P | 78351-65-2P | 78351-66-3P |
| 78351-67-4P | 78351-68-5P | 78351-69-6P |
| 78351-70-9P | 78351-71-0P | 78351-72-1P |
| 78351-73-2P | 78351-74-3P | 78351-75-4P |
| 78351-76-5P | 78351-77-6P | 78351-81-2P |
| 78351-82-3P | 78351-83-4P | 78351-84-5P |
| 78351-86-7P | 78351-89-0P | 78351-90-3P |
| 78351-91-4P | 78351-92-5P | 78351-95-8P |
| 78352-00-8P | 78352-01-9P | 78352-02-0P |
| 78352-03-1P | 78352-04-2P | 78352-05-3P |
| 78352-06-4P | 78352-08-6P | 78352-09-7P |
| 78352-10-0P | 78352-11-1P | 78352-13-3P |
| 78352-14-4P | 78352-15-5P | 78352-16-6P |
| 78352-18-8P | 78352-19-9P | 78352-20-2P |
| 78352-21-3P | 78352-22-4P | 78352-23-5P |
| 78352-24-6P | 78352-25-7P | 78352-26-8P |
| 78352-27-9P | 78352-28-0P | 78352-29-1P |
| 78352-30-4P | 78352-31-5P | 78352-32-6P |
| 78352-33-7P | 78352-34-8P | 78352-35-9P |
| 78352-36-0P | 78352-37-1P | 78352-38-2P |
| 78352-39-3P | 78352-40-6P | 78352-41-7P |
| 78352-42-8P | 78352-43-9P | 78352-44-0P |
| 78352-45-1P | 78352-46-2P | 78352-47-3P |
| 78352-48-4P | 78352-49-5P | 78352-50-8P |
| 78352-51-9P | 78352-52-0P | 78352-53-1P |
| 78352-58-6P | 78352-59-7P | 78352-60-0P |
| 78352-62-2P | 78352-63-3P | 78352-65-5P |
| 78352-66-6P | 78352-67-7P | 78352-68-8P |
| 78361-49-6P | 78361-50-9P | 78361-51-0P |
| 78361-52-1P | 78933-58-1P | 80019-50-7P |
| 80019-51-8P | | |

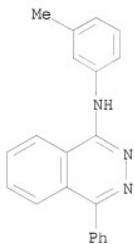
RL: SPN (Synthetic preparation); **PREP** (Preparation)
(preparation and platelet aggregation-inhibiting activity of)

RN 78351-61-8 CAPLUS

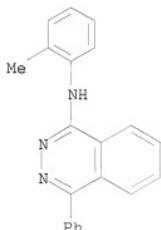
CN 1-Phthalazinamine, N-(4-methylphenyl)-4-phenyl- (CA INDEX NAME)



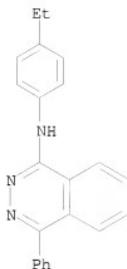
RN 78351-62-9 CAPLUS
CN 1-Phthalazinamine, N-(3-methylphenyl)-4-phenyl- (CA INDEX NAME)



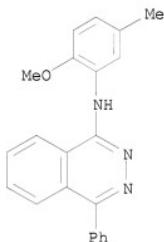
RN 78351-63-0 CAPLUS
CN 1-Phthalazinamine, N-(2-methylphenyl)-4-phenyl- (CA INDEX NAME)



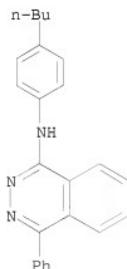
RN 78351-64-1 CAPLUS
CN 1-Phthalazinamine, N-(4-ethylphenyl)-4-phenyl- (CA INDEX NAME)



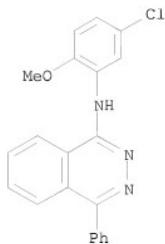
RN 78351-65-2 CAPLUS
CN 1-Phthalazinamine, N-(2-methoxy-5-methylphenyl)-4-phenyl- (CA INDEX NAME)



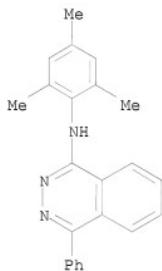
RN 78351-66-3 CAPLUS
CN 1-Phthalazinamine, N-(4-butylphenyl)-4-phenyl- (CA INDEX NAME)



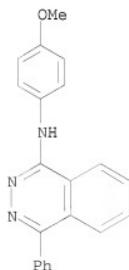
RN 78351-67-4 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



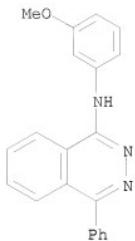
RN 78351-68-5 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



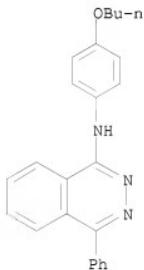
RN 78351-69-6 CAPLUS
CN 1-Phthalazinamine, N-(4-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



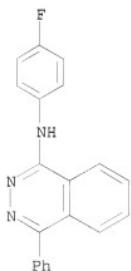
RN 78351-70-9 CAPLUS
CN 1-Phthalazinamine, N-(3-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



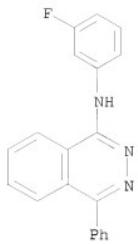
RN 78351-71-0 CAPLUS
CN 1-Phthalazinamine, N-(4-butoxyphenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-72-1 CAPLUS
CN 1-Phthalazinamine, N-(4-fluorophenyl)-4-phenyl- (CA INDEX NAME)

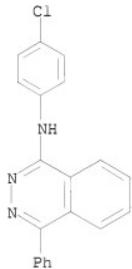


RN 78351-73-2 CAPLUS
CN 1-Phthalazinamine, N-(3-fluorophenyl)-4-phenyl- (CA INDEX NAME)



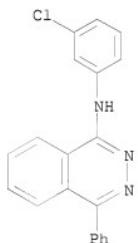
RN 78351-74-3 CAPLUS

CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-phenyl- (CA INDEX NAME)



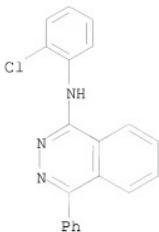
RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)

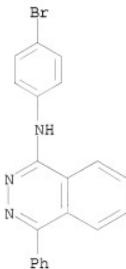


RN 78351-76-5 CAPLUS

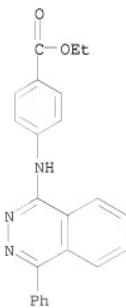
CN 1-Phthalazinamine, N-(2-chlorophenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-77-6 CAPLUS
CN 1-Phthalazinamine, N-(4-bromophenyl)-4-phenyl- (CA INDEX NAME)

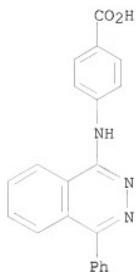


RN 78351-81-2 CAPLUS
CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]-, ethyl ester (CA INDEX NAME)



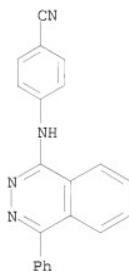
RN 78351-82-3 CAPLUS

CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)



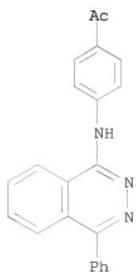
RN 78351-83-4 CAPLUS

CN Benzonitrile, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)

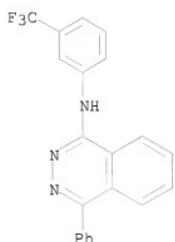


RN 78351-84-5 CAPLUS

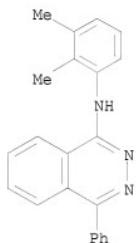
CN Ethanone, 1-[4-[(4-phenyl-1-phthalazinyl)amino]phenyl]- (CA INDEX NAME)



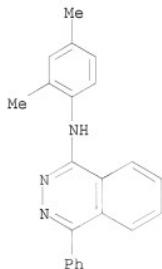
RN 78351-86-7 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 78351-89-0 CAPLUS
CN 1-Phthalazinamine, N-(2,3-dimethylphenyl)-4-phenyl- (CA INDEX NAME)

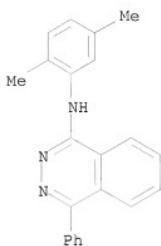


RN 78351-90-3 CAPLUS
CN 1-Phthalazinamine, N-(2,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



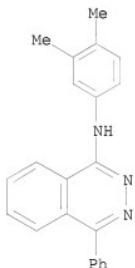
RN 78351-91-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



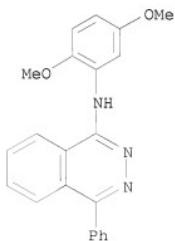
RN 78351-92-5 CAPLUS

CN 1-Phthalazinamine, N-(3,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



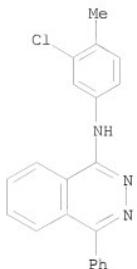
RN 78351-95-8 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-phenyl- (CA INDEX NAME)

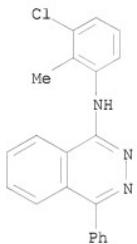


RN 78352-00-8 CAPLUS

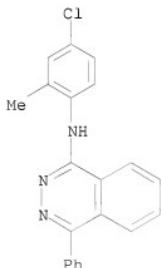
CN 1-Phthalazinamine, N-(3-chloro-4-methylphenyl)-4-phenyl- (CA INDEX NAME)



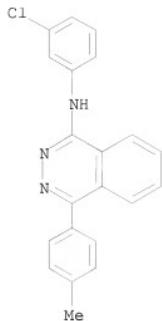
RN 78352-01-9 CAPLUS
CN 1-Phthalazinamine, N-(3-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)



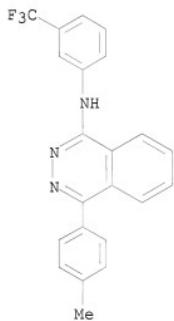
RN 78352-02-0 CAPLUS
CN 1-Phthalazinamine, N-(4-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)



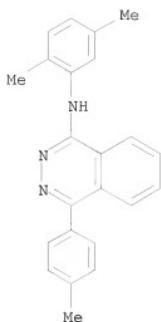
RN 78352-03-1 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



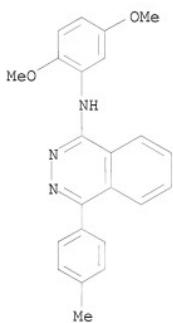
RN 78352-04-2 CAPLUS
CN 1-Phthalazinamine, 4-(4-methylphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



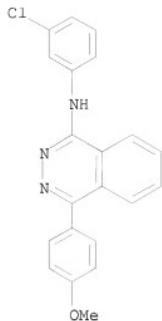
RN 78352-05-3 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



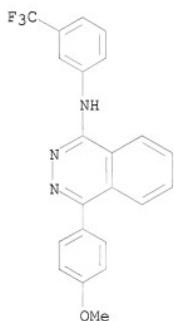
RN 78352-06-4 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



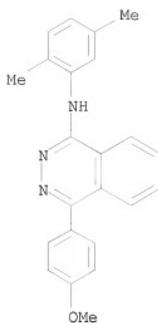
RN 78352-08-6 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



RN 78352-09-7 CAPLUS
CN 1-Phthalazinamine, 4-(4-methoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

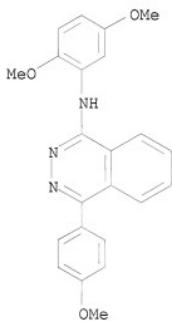


RN 78352-10-0 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



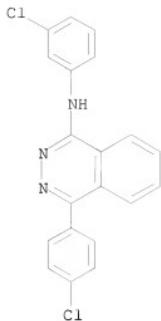
RN 78352-11-1 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



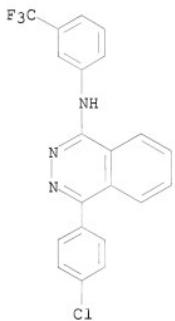
RN 78352-13-3 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-chlorophenyl)- (CA INDEX NAME)



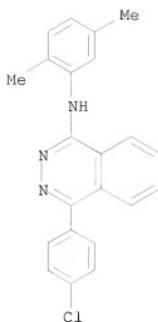
RN 78352-14-4 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



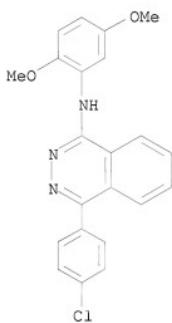
RN 78352-15-5 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



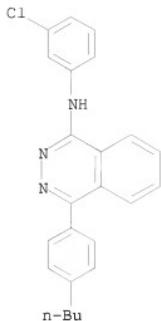
RN 78352-16-6 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)

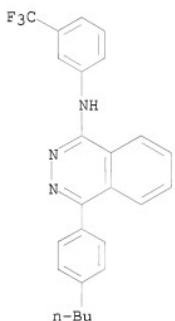


RN 78352-18-8 CAPLUS

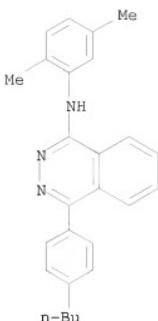
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(3-chlorophenyl)- (CA INDEX NAME)



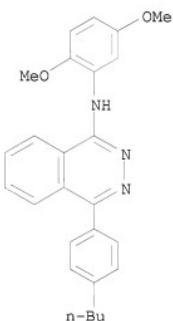
RN 78352-19-9 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



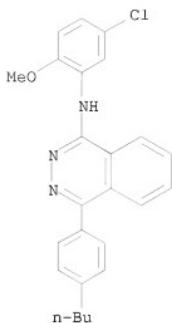
RN 78352-20-2 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



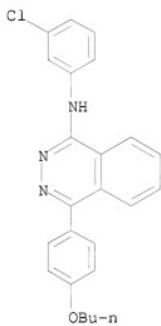
RN 78352-21-3 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



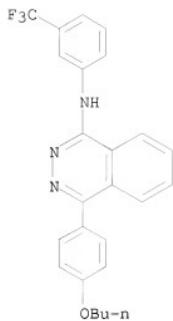
RN 78352-22-4 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(5-chloro-2-methoxyphenyl)- (CA INDEX NAME)



RN 78352-23-5 CAPLUS
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(3-chlorophenyl)- (CA INDEX NAME)

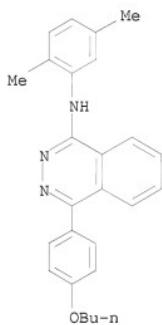


RN 78352-24-6 CAPLUS
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



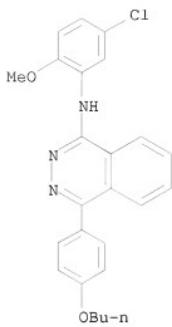
RN 78352-25-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)

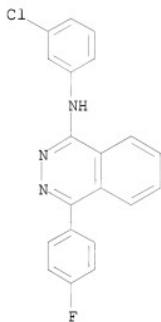


RN 78352-26-8 CAPLUS

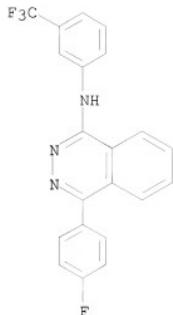
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(5-chloro-2-methoxyphenyl)- (CA INDEX NAME)



RN 78352-27-9 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)

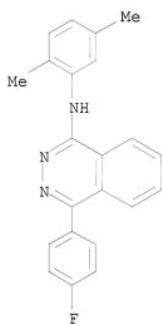


RN 78352-28-0 CAPLUS
CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



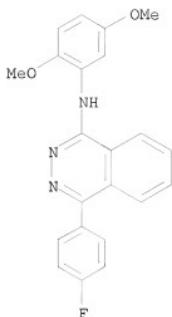
RN 78352-29-1 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



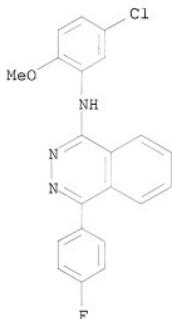
RN 78352-30-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



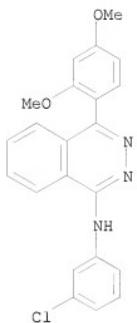
RN 78352-31-5 CAPLUS

CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



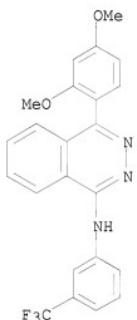
RN 78352-32-6 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(2,4-dimethoxyphenyl)- (CA INDEX NAME)



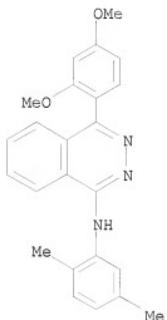
RN 78352-33-7 CAPLUS

CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-[3-(trifluoromethyl)phenyl]-
(CA INDEX NAME)

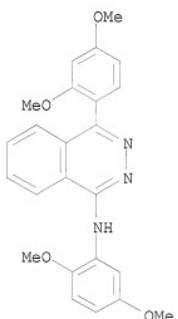


RN 78352-34-8 CAPLUS

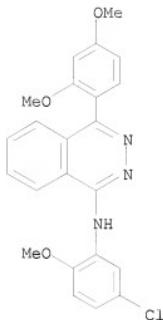
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2,5-dimethylphenyl)-
(CA INDEX NAME)



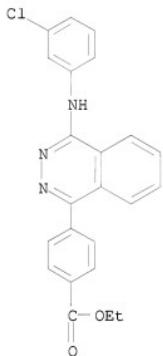
RN 78352-35-9 CAPLUS
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



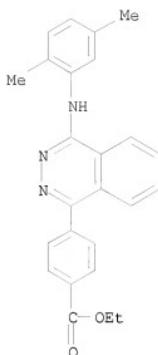
RN 78352-36-0 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(2,4-dimethoxyphenyl)- (CA INDEX NAME)



RN 78352-37-1 CAPLUS
CN Benzoic acid, 4-[4-[(3-chlorophenyl)amino]-1-phthalazinyl]-, ethyl ester
(CA INDEX NAME)

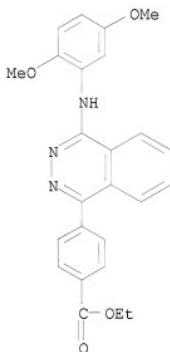


RN 78352-38-2 CAPLUS
CN Benzoic acid, 4-[4-[(2,5-dimethylphenyl)amino]-1-phthalazinyl]-, ethyl ester
(CA INDEX NAME)



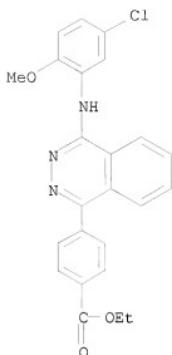
RN 78352-39-3 CAPLUS

CN Benzoic acid, 4-[4-[(2,5-dimethoxyphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



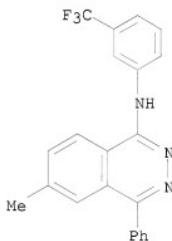
RN 78352-40-6 CAPLUS

CN Benzoic acid, 4-[4-[(5-chloro-2-methoxyphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



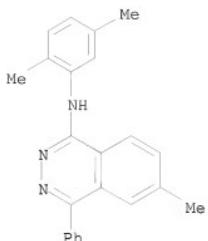
RN 78352-41-7 CAPLUS

CN 1-Phthalazinamine, 6-methyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

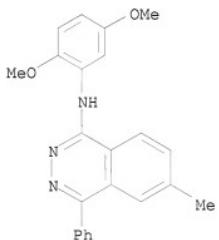


RN 78352-42-8 CAPLUS

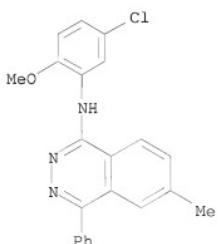
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



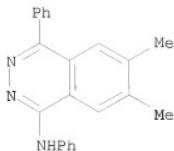
RN 78352-43-9 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



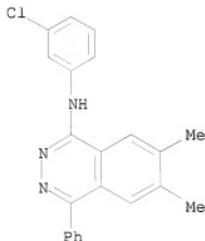
RN 78352-44-0 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



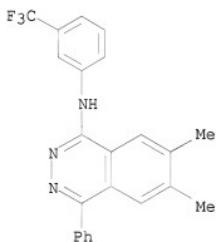
RN 78352-45-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethyl-N,4-diphenyl- (CA INDEX NAME)



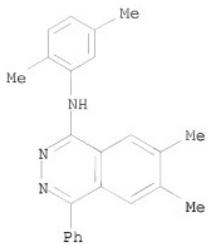
RN 78352-46-2 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



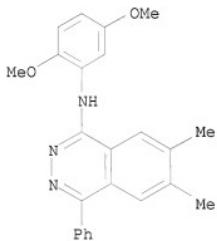
RN 78352-47-3 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



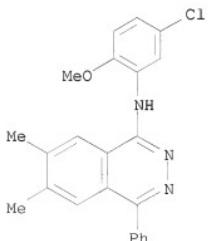
RN 78352-48-4 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



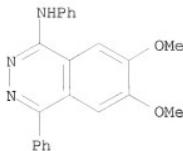
RN 78352-49-5 CAPLUS
CN 1-PhtHALAZINamine, N-(2,5-dimethoxyphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



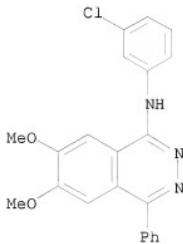
RN 78352-50-8 CAPLUS
CN 1-PhtHALAZINamine, N-(5-chloro-2-methoxyphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



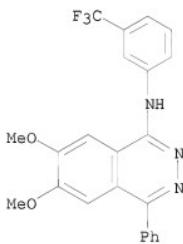
RN 78352-51-9 CAPLUS
CN 1-PhtHALAZINamine, 6,7-dimethoxy-N,4-diphenyl- (CA INDEX NAME)



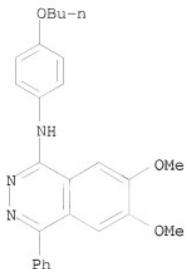
RN 78352-52-0 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



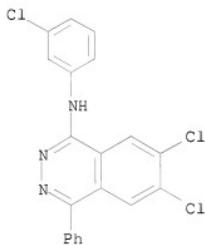
RN 78352-53-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethoxy-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



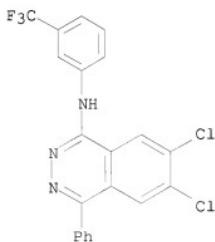
RN 78352-58-6 CAPLUS
CN 1-Phthalazinamine, N-(4-butoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



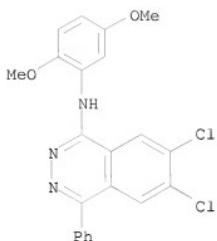
RN 78352-59-7 CAPLUS
CN 1-Phtalazinamine, 6,7-dichloro-N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



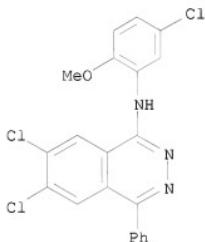
RN 78352-60-0 CAPLUS
CN 1-Phtalazinamine, 6,7-dichloro-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



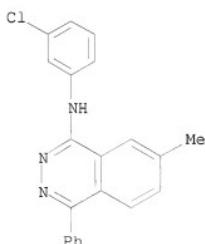
RN 78352-62-2 CAPLUS
CN 1-Phtalazinamine, 6,7-dichloro-N-(2,5-dimethoxyphenyl)-4-phenyl- (CA INDEX NAME)



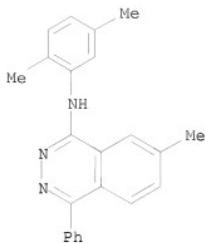
RN 78352-63-3 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-N-(5-chloro-2-methoxyphenyl)-4-phenyl-
(CA INDEX NAME)



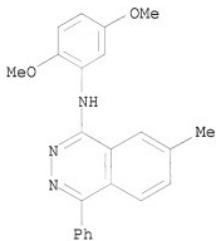
RN 78352-65-5 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



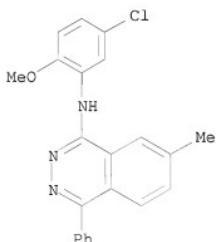
RN 78352-66-6 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



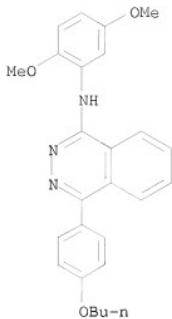
RN 78352-67-7 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



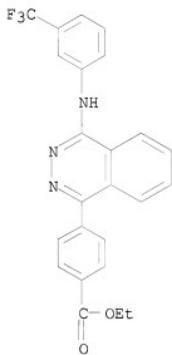
RN 78352-68-8 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



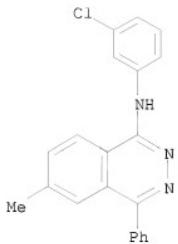
RN 78361-49-6 CAPLUS
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



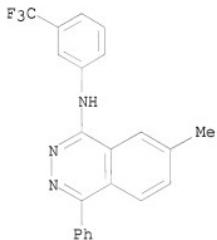
RN 78361-50-9 CAPLUS
CN Benzoic acid, 4-[4-[(3-(trifluoromethyl)phenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



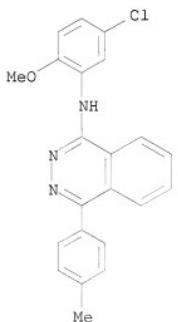
RN 78361-51-0 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



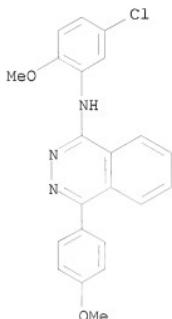
RN 78361-52-1 CAPLUS
CN 1-Phtalazinamine, 7-methyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



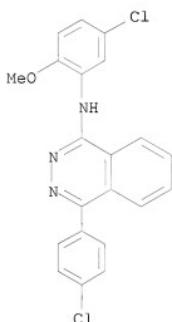
RN 78933-58-1 CAPLUS
CN 1-Phtalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



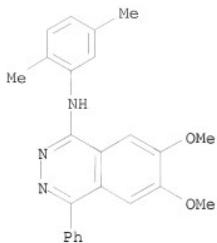
RN 80019-50-7 CAPLUS
CN 1-Phtalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-methoxyphenyl)- (CA
INDEX NAME)



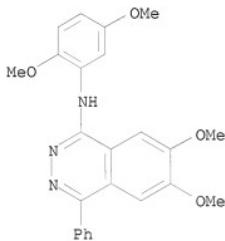
RN 80019-51-8 CAPLUS
CN 1-Phtalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-chlorophenyl)- (CA
INDEX NAME)



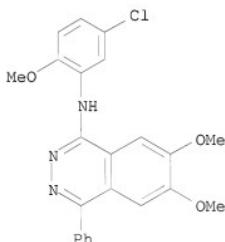
IT 78352-54-2P 78352-55-3P 78352-56-4P
78352-57-5P 78352-61-1P 78352-64-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 78352-54-2 CAPLUS
CN 1-Phtalazinamine, N-(2,5-dimethylphenyl)-6,7-dimethoxy-4-phenyl- (CA
INDEX NAME)



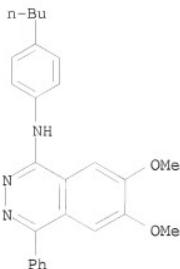
RN 78352-55-3 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



RN 78352-56-4 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)

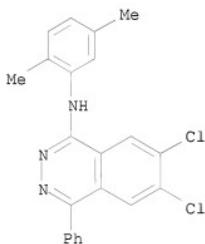


RN 78352-57-5 CAPLUS
CN 1-Phthalazinamine, N-(4-butylphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



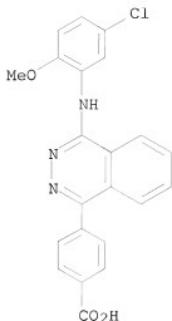
RN 78352-61-1 CAPLUS

CN 1-Phthalazinamine, 6,7-dichloro-N-(2,5-dimethylphenyl)-4-phenyl- (CA
INDEX NAME)



RN 78352-64-4 CAPLUS

CN Benzoic acid, 4-[4-[(5-chloro-2-methoxyphenyl)amino]-1-phthalazinyl]- (CA
INDEX NAME)

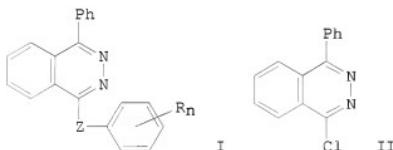


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 93 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1982:6745 CAPLUS
 DOCUMENT NUMBER: 96:6745
 ORIGINAL REFERENCE NO.: 96:1227a,1230a
 TITLE: 3-Phenylphthalazine derivatives
 PATENT ASSIGNEE(S): Mitsubishi Yuka Yakuhin Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 56053659 | A | 19810513 | JP 1979-130435 | 19791009 |
| JP 62044525 | B | 19870921 | | |

PRIORITY APPLN. INFO.: JP 1979-130435 A 19791009
 GI



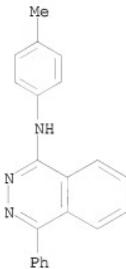
AB Forty-four 4-phenylphthalazine derivs. I ($Z = \text{NH, O, S, CH}_2\text{CO}$; $R = \text{H, alkyl, alkoxy, etc.}; n = 1-3$) were prepared by reaction of II with $\text{RnC}_6\text{H}_5\text{NR1}$ ($R1 = \text{NH}_2, \text{OH}, \text{SH, COMe}$). Platelet aggregation inhibitory activities of I were given by use of rabbit platelet rich plasma. Thus, a mixture of 2.41 g II, 4-MeC₆H₄NH₂, and 70 mg Cu was stirred 1 h at 100° to give 29% I ($R = 4\text{-Me, } n = 1, \text{ } Z = \text{NH}$).

IT 78351-61-8P 78351-62-9P 78351-63-0P
78351-64-1P 78351-66-3P 78351-68-5P
78351-69-6P 78351-70-9P 78351-71-0P
78351-72-1P 78351-73-2P 78351-74-3P
78351-75-4P 78351-76-5P 78351-77-6P
78351-81-2P 78351-82-3P 78351-83-4P
78351-84-5P 78351-86-7P 78351-89-0P
78351-90-3P 78351-91-4P 78351-92-5P
78351-95-8P 78352-00-8P 78352-01-9P
78352-02-0P 78933-23-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and platelet aggregation inhibitor activity of)

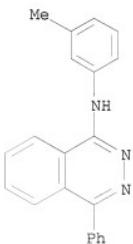
RN 78351-61-8 CAPLUS

CN 1-Phthalazinamine, N-(4-methylphenyl)-4-phenyl- (CA INDEX NAME)



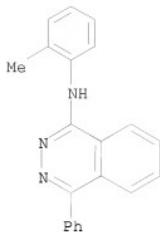
RN 78351-62-9 CAPLUS

CN 1-Phthalazinamine, N-(3-methylphenyl)-4-phenyl- (CA INDEX NAME)

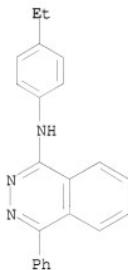


RN 78351-63-0 CAPLUS

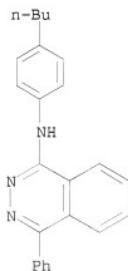
CN 1-Phthalazinamine, N-(2-methylphenyl)-4-phenyl- (CA INDEX NAME)



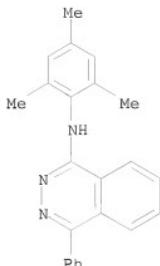
RN 78351-64-1 CAPLUS
CN 1-Phthalazinamine, N-(4-ethylphenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-66-3 CAPLUS
CN 1-Phthalazinamine, N-(4-butylphenyl)-4-phenyl- (CA INDEX NAME)

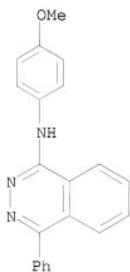


RN 78351-68-5 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



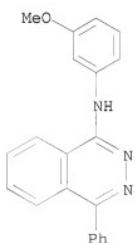
RN 78351-69-6 CAPLUS

CN 1-Phthalazinamine, N-(4-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



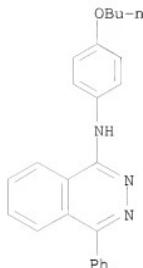
RN 78351-70-9 CAPLUS

CN 1-Phthalazinamine, N-(3-methoxyphenyl)-4-phenyl- (CA INDEX NAME)

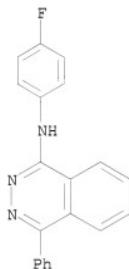


RN 78351-71-0 CAPLUS

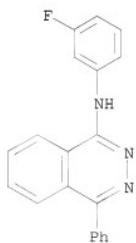
CN 1-Phthalazinamine, N-(4-butoxyphenyl)-4-phenyl- (CA INDEX NAME)



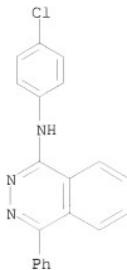
RN 78351-72-1 CAPLUS
CN 1-PhtHALAZINamine, N-(4-fluorophenyl)-4-phenyl- (CA INDEX NAME)



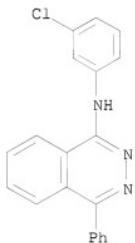
RN 78351-73-2 CAPLUS
CN 1-PhtHALAZINamine, N-(3-fluorophenyl)-4-phenyl- (CA INDEX NAME)



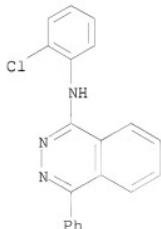
RN 78351-74-3 CAPLUS
CN 1-PhtHALAZINamine, N-(4-chlorophenyl)-4-phenyl- (CA INDEX NAME)



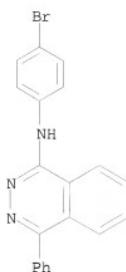
RN 78351-75-4 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



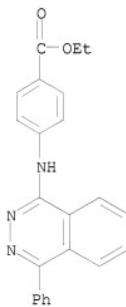
RN 78351-76-5 CAPLUS
CN 1-Phthalazinamine, N-(2-chlorophenyl)-4-phenyl- (CA INDEX NAME)



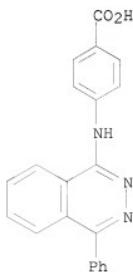
RN 78351-77-6 CAPLUS
CN 1-Phthalazinamine, N-(4-bromophenyl)-4-phenyl- (CA INDEX NAME)



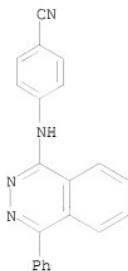
RN 78351-81-2 CAPLUS
CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]-, ethyl ester (CA INDEX NAME)



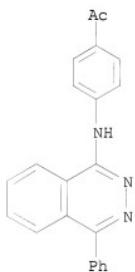
RN 78351-82-3 CAPLUS
CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)



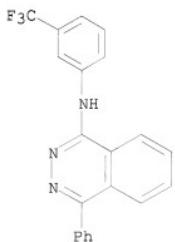
RN 78351-83-4 CAPLUS
CN Benzonitrile, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)



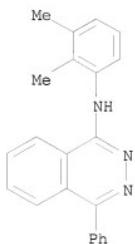
RN 78351-84-5 CAPLUS
CN Ethanone, 1-[4-[(4-phenyl-1-phthalazinyl)amino]phenyl]- (CA INDEX NAME)



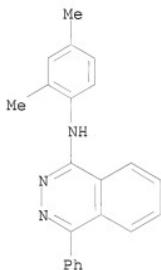
RN 78351-86-7 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



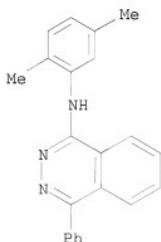
RN 78351-89-0 CAPLUS
CN 1-Phthalazinamine, N-(2,3-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



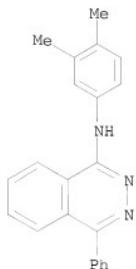
RN 78351-90-3 CAPLUS
CN 1-Phthalazinamine, N-(2,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



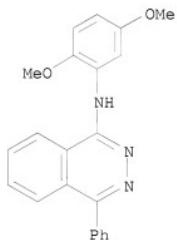
RN 78351-91-4 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



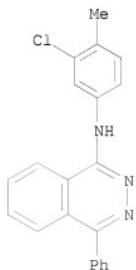
RN 78351-92-5 CAPLUS
CN 1-Phtalazinamine, N-(3,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-95-8 CAPLUS
CN 1-Phtalazinamine, N-(2,5-dimethoxyphenyl)-4-phenyl- (CA INDEX NAME)

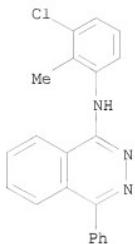


RN 78352-00-8 CAPLUS
CN 1-Phtalazinamine, N-(3-chloro-4-methylphenyl)-4-phenyl- (CA INDEX NAME)

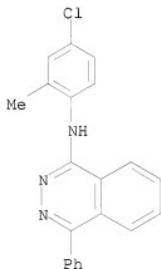


RN 78352-01-9 CAPLUS

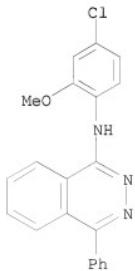
CN 1-Phthalazinamine, N-(3-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)



RN 78352-02-0 CAPLUS
CN 1-Phthalazinamine, N-(4-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)



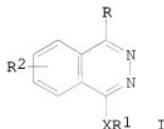
RN 78933-23-0 CAPLUS
CN 1-Phthalazinamine, N-(4-chloro-2-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



L6 ANSWER 94 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1981:515579 CAPLUS
 DOCUMENT NUMBER: 95:115579
 ORIGINAL REFERENCE NO.: 95:19405a, 19408a
 TITLE: 4-Phenylphthalazine derivatives
 PATENT ASSIGNEE(S): Mitsubishi Yuka Yakuhin Co., Ltd., Japan
 SOURCE: Neth. Appl., 46 pp.
 CODEN: NAXXAN
 DOCUMENT TYPE: Patent
 LANGUAGE: Dutch
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| NL 8005411 | A | 19810413 | NL 1980-5411 | 19800930 |
| JP 56053660 | A | 19810513 | JP 1979-130434 | 19791009 |
| JP 62042901 | B | 19870910 | | |
| JP 57048972 | A | 19820320 | JP 1980-124644 | 19800910 |
| JP 63034871 | B | 19880712 | | |
| GB 2063249 | A | 19810603 | GB 1980-30906 | 19800925 |
| PRIORITY APPLN. INFO.: | | | JP 1979-130434 | A 19791009 |
| | | | JP 1980-124644 | A 19800910 |

GI



AB Phthalazines I (X = NH, O; R, R₁ = optionally substituted Ph; R₂ = H, alkyl, alkoxy, halogen, alkoxy carbonyl, CO₂H, acyl, OH, CF₃) were prepared. Thus I (X = NH, R = Ph, R₁ = 4-MeC₆H₄, R₂ = H, II) was obtained in 29% yield by treating 1-chloro-4-phenylphthalazine with 4-MeC₆H₄NH₂ in the presence of Cu powder. II gave 56.5% inhibition of blood platelet aggregation at 3 + 10⁻⁶ M in vitro.

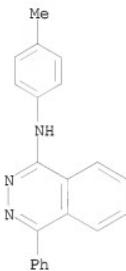
IT 78351-61-8P 78351-62-9P 78351-63-0P
 78351-64-1P 78351-65-2P 78351-66-3P
 78351-67-4P 78351-68-5P 78351-69-6P
 78351-70-9P 78351-71-0P 78351-72-1P
 78351-73-2P 78351-74-3P 78351-75-4P
 78351-76-5P 78351-77-6P 78351-81-2P
 78351-82-3P 78351-83-4P 78351-84-5P
 78351-86-7P 78351-89-0P 78351-90-3P
 78351-91-4P 78351-92-5P 78351-95-8P
 78352-00-8P 78352-01-9P 78352-02-0P
 78352-03-1P 78352-04-2P 78352-05-3P
 78352-06-4P 78352-08-6P 78352-09-7P
 78352-10-0P 78352-11-1P 78352-12-2P
 78352-13-3P 78352-14-4P 78352-15-5P
 78352-16-6P 78352-17-7P 78352-18-8P
 78352-19-9P 78352-20-2P 78352-21-3P
 78352-22-4P 78352-23-5P 78352-24-6P
 78352-25-7P 78352-26-8P 78352-27-9P
 78352-28-0P 78352-29-1P 78352-30-4P
 78352-31-5P 78352-32-6P 78352-33-7P

78352-34-8P 78352-35-9P 78352-36-0P
78352-37-1P 78352-38-2P 78352-39-3P
78352-40-6P 78352-45-1P 78352-46-2P
78352-47-3P 78352-48-4P 78352-49-5P
78352-50-8P 78352-51-9P 78352-52-0P
78352-53-1P 78352-58-6P 78352-60-0P
78352-62-2P 78352-63-3P 78361-49-6P
78361-50-9P 78933-58-1P 78976-44-0P
78976-45-1P 78976-46-2P 78976-47-3P
78976-48-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and blood platelet aggregation-inhibiting activity of)

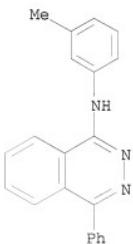
RN 78351-61-8 CAPLUS

CN 1-Phthalazinamine, N-(4-methylphenyl)-4-phenyl- (CA INDEX NAME)



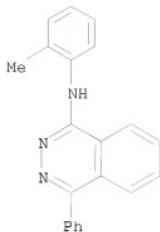
RN 78351-62-9 CAPLUS

CN 1-Phthalazinamine, N-(3-methylphenyl)-4-phenyl- (CA INDEX NAME)

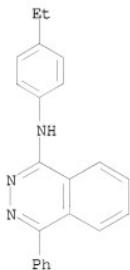


RN 78351-63-0 CAPLUS

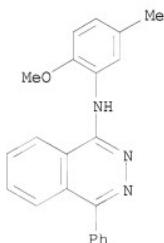
CN 1-Phthalazinamine, N-(2-methylphenyl)-4-phenyl- (CA INDEX NAME)



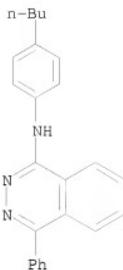
RN 78351-64-1 CAPLUS
CN 1-Phthalazinamine, N-(4-ethylphenyl)-4-phenyl- (CA INDEX NAME)



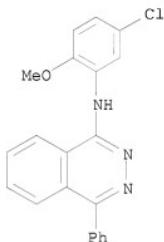
RN 78351-65-2 CAPLUS
CN 1-Phthalazinamine, N-(2-methoxy-5-methylphenyl)-4-phenyl- (CA INDEX NAME)



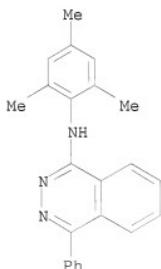
RN 78351-66-3 CAPLUS
CN 1-Phthalazinamine, N-(4-butylphenyl)-4-phenyl- (CA INDEX NAME)



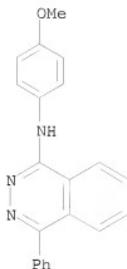
RN 78351-67-4 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



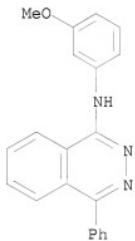
RN 78351-68-5 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



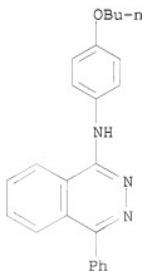
RN 78351-69-6 CAPLUS
CN 1-Phthalazinamine, N-(4-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



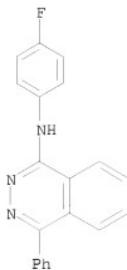
RN 78351-70-9 CAPLUS
CN 1-Phtalazinamine, N-(3-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



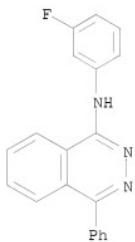
RN 78351-71-0 CAPLUS
CN 1-Phtalazinamine, N-(4-butoxyphenyl)-4-phenyl- (CA INDEX NAME)



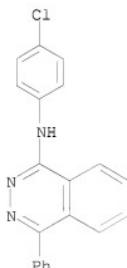
RN 78351-72-1 CAPLUS
CN 1-Phtalazinamine, N-(4-fluorophenyl)-4-phenyl- (CA INDEX NAME)



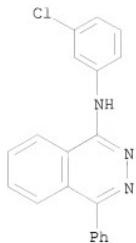
RN 78351-73-2 CAPLUS
CN 1-Phtalazinamine, N-(3-fluorophenyl)-4-phenyl- (CA INDEX NAME)



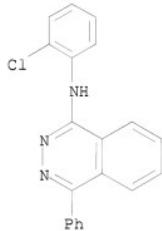
RN 78351-74-3 CAPLUS
CN 1-Phtalazinamine, N-(4-chlorophenyl)-4-phenyl- (CA INDEX NAME)



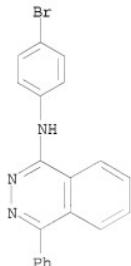
RN 78351-75-4 CAPLUS
CN 1-Phtalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



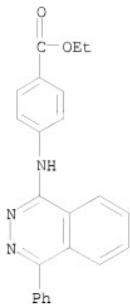
RN 78351-76-5 CAPLUS
CN 1-Phthalazinamine, N-(2-chlorophenyl)-4-phenyl- (CA INDEX NAME)



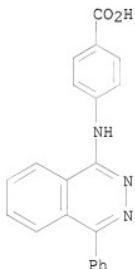
RN 78351-77-6 CAPLUS
CN 1-Phthalazinamine, N-(4-bromophenyl)-4-phenyl- (CA INDEX NAME)



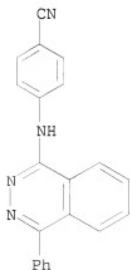
RN 78351-81-2 CAPLUS
CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]-, ethyl ester (CA INDEX NAME)



RN 78351-82-3 CAPLUS
CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)

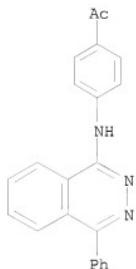


RN 78351-83-4 CAPLUS
CN Benzonitrile, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)



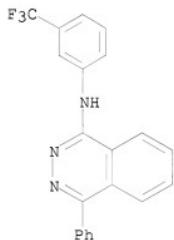
RN 78351-84-5 CAPLUS

CN Ethanone, 1-[4-[(4-phenyl-1-phthalazinyl)amino]phenyl]- (CA INDEX NAME)



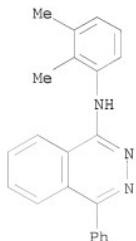
RN 78351-86-7 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



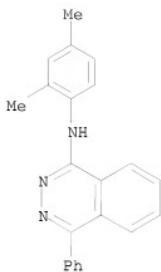
RN 78351-89-0 CAPLUS

CN 1-Phthalazinamine, N-(2,3-dimethylphenyl)-4-phenyl- (CA INDEX NAME)

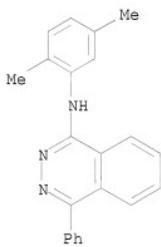


RN 78351-90-3 CAPLUS

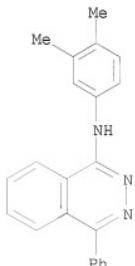
CN 1-Phthalazinamine, N-(2,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



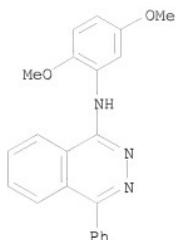
RN 78351-91-4 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



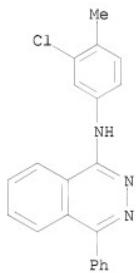
RN 78351-92-5 CAPLUS
CN 1-Phthalazinamine, N-(3,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



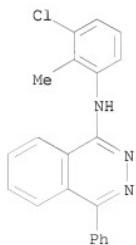
RN 78351-95-8 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-phenyl- (CA INDEX NAME)



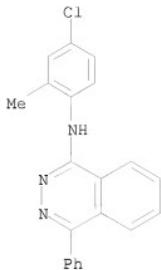
RN 78352-00-8 CAPLUS
CN 1-Phtalazinamine, N-(3-chloro-4-methylphenyl)-4-phenyl- (CA INDEX NAME)



RN 78352-01-9 CAPLUS
CN 1-Phtalazinamine, N-(3-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)

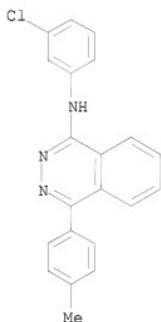


RN 78352-02-0 CAPLUS
CN 1-Phtalazinamine, N-(4-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)



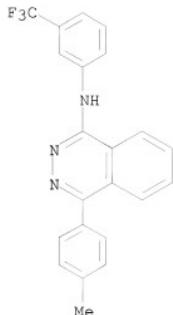
RN 78352-03-1 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



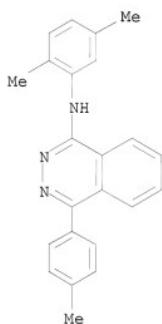
RN 78352-04-2 CAPLUS

CN 1-Phthalazinamine, 4-(4-methylphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



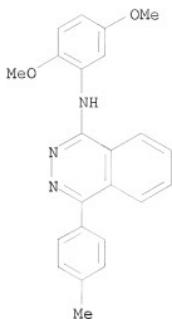
RN 78352-05-3 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



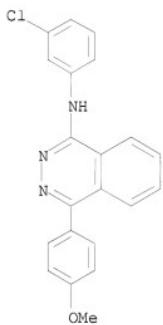
RN 78352-06-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



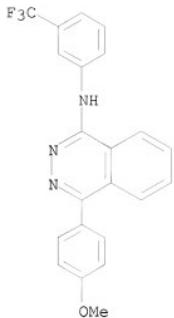
RN 78352-08-6 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



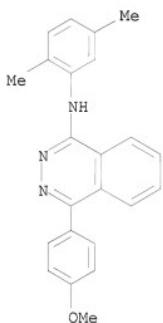
RN 78352-09-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-methoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



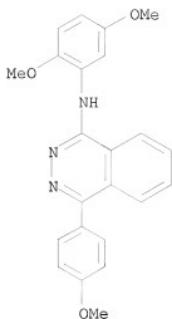
RN 78352-10-0 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



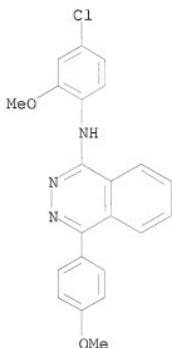
RN 78352-11-1 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



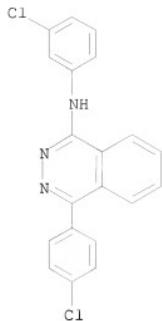
RN 78352-12-2 CAPLUS

CN 1-Phthalazinamine, N-(4-chloro-2-methoxyphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



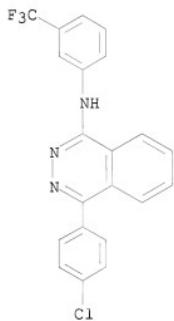
RN 78352-13-3 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-chlorophenyl)- (CA INDEX NAME)



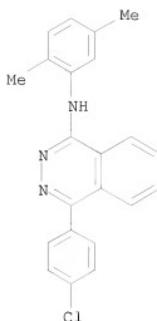
RN 78352-14-4 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



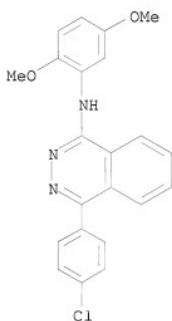
RN 78352-15-5 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



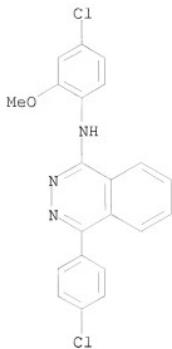
RN 78352-16-6 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



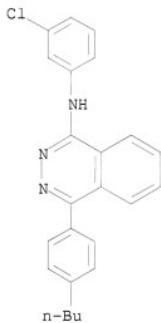
RN 78352-17-7 CAPLUS

CN 1-Phthalazinamine, N-(4-chloro-2-methoxyphenyl)-4-(4-chlorophenyl)- (CA INDEX NAME)



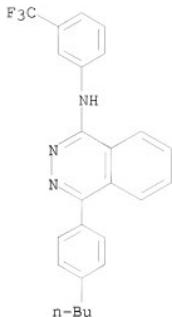
RN 78352-18-8 CAPLUS

CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(3-chlorophenyl)- (CA INDEX NAME)

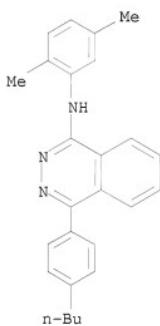


RN 78352-19-9 CAPLUS

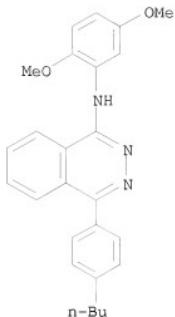
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



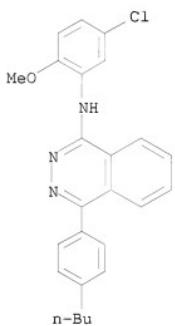
RN 78352-20-2 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



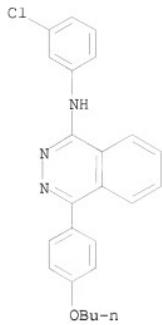
RN 78352-21-3 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



RN 78352-22-4 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(5-chloro-2-methoxyphenyl)- (CA INDEX NAME)

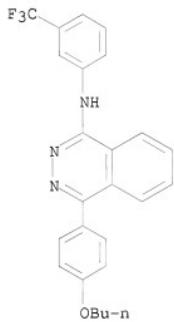


RN 78352-23-5 CAPLUS
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(3-chlorophenyl)- (CA INDEX NAME)



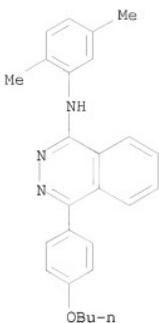
RN 78352-24-6 CAPLUS

CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



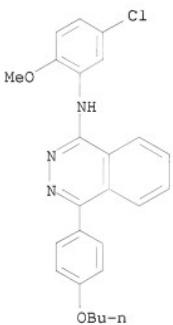
RN 78352-25-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



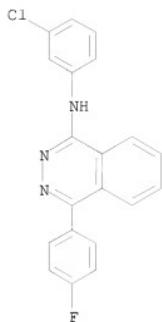
RN 78352-26-8 CAPLUS

CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(5-chloro-2-methoxyphenyl)- (CA INDEX NAME)



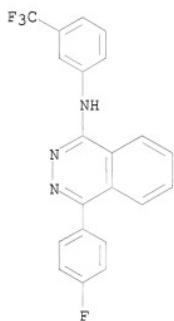
RN 78352-27-9 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



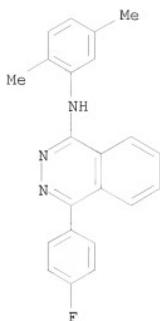
RN 78352-28-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



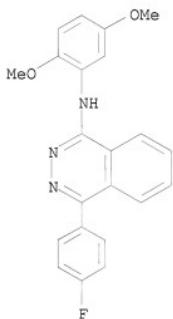
RN 78352-29-1 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



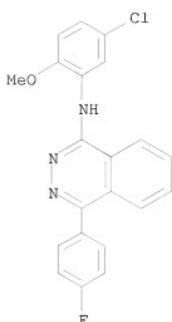
RN 78352-30-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



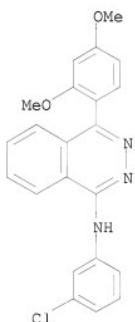
RN 78352-31-5 CAPLUS

CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



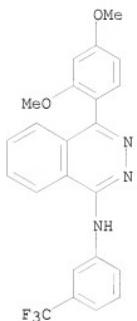
RN 78352-32-6 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(2,4-dimethoxyphenyl)- (CA INDEX NAME)

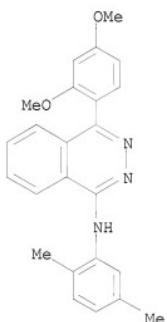


RN 78352-33-7 CAPLUS

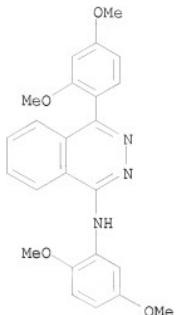
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 78352-34-8 CAPLUS
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2,5-dimethylphenyl)- (CA
INDEX NAME)

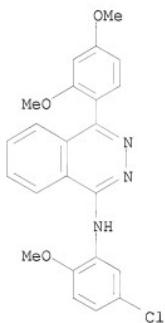


RN 78352-35-9 CAPLUS
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2,5-dimethoxyphenyl)- (CA
INDEX NAME)



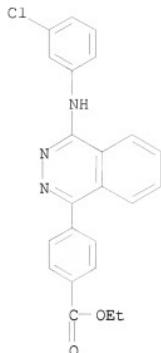
RN 78352-36-0 CAPLUS

CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(2,4-dimethoxyphenyl)-
(CA INDEX NAME)

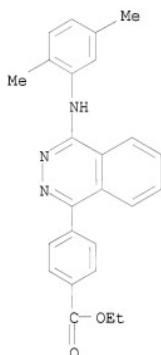


RN 78352-37-1 CAPLUS

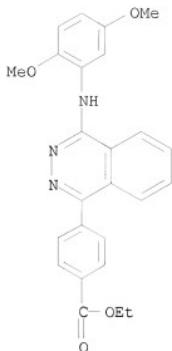
CN Benzoic acid, 4-[(3-chlorophenyl)amino]-1-phthalazinyl-, ethyl ester
(CA INDEX NAME)



RN 78352-38-2 CAPLUS
CN Benzoic acid, 4-[4-[(2,5-dimethylphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)

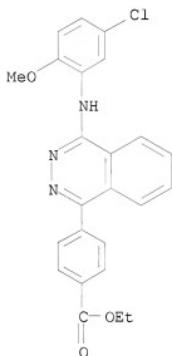


RN 78352-39-3 CAPLUS
CN Benzoic acid, 4-[4-[(2,5-dimethoxyphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



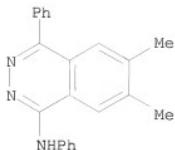
RN 78352-40-6 CAPLUS

CN Benzoic acid, 4-[4-[(5-chloro-2-methoxyphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)

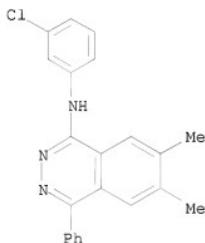


RN 78352-45-1 CAPLUS

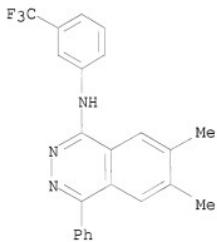
CN 1-Phthalazinamine, 6,7-dimethyl-N,4-diphenyl- (CA INDEX NAME)



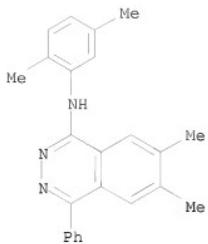
RN 78352-46-2 CAPLUS
CN 1-Phtalazinamine, N-(3-chlorophenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



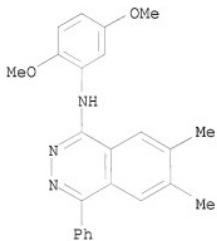
RN 78352-47-3 CAPLUS
CN 1-Phtalazinamine, 6,7-dimethyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



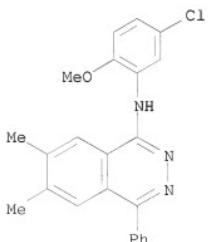
RN 78352-48-4 CAPLUS
CN 1-Phtalazinamine, N-(2,5-dimethylphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



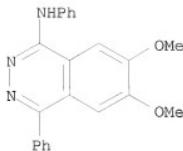
RN 78352-49-5 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



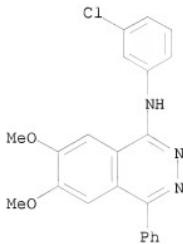
RN 78352-50-8 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



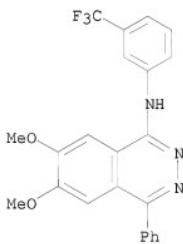
RN 78352-51-9 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethoxy-N,4-diphenyl- (CA INDEX NAME)



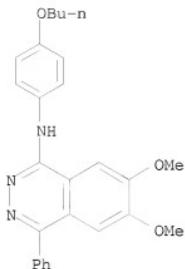
RN 78352-52-0 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



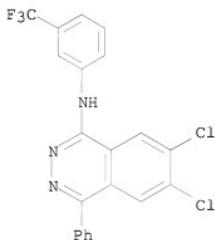
RN 78352-53-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethoxy-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



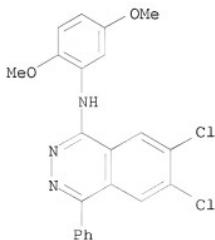
RN 78352-58-6 CAPLUS
CN 1-Phthalazinamine, N-(4-butoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



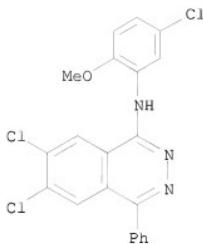
RN 78352-60-0 CAPLUS
CN 1-Phtalazinamine, 6,7-dichloro-4-phenyl-N-[3-(trifluoromethyl)phenyl]-
(CA INDEX NAME)



RN 78352-62-2 CAPLUS
CN 1-Phtalazinamine, 6,7-dichloro-N-(2,5-dimethoxyphenyl)-4-phenyl- (CA INDEX NAME)

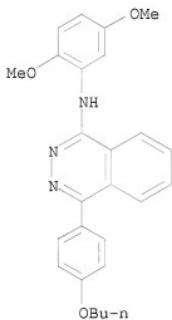


RN 78352-63-3 CAPLUS
CN 1-Phtalazinamine, 6,7-dichloro-N-(5-chloro-2-methoxyphenyl)-4-phenyl-
(CA INDEX NAME)



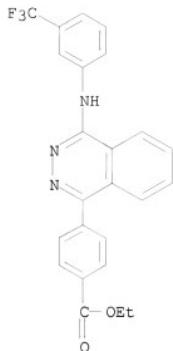
RN 78361-49-6 CAPLUS

CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)

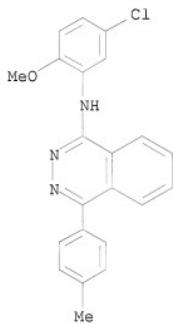


RN 78361-50-9 CAPLUS

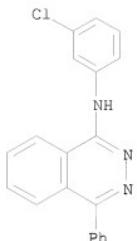
CN Benzoic acid, 4-[4-[(3-(trifluoromethyl)phenyl]amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



RN 78933-58-1 CAPLUS
CN 1-Phtalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-methylphenyl)- (CA
INDEX NAME)

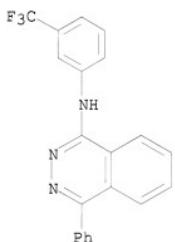


RN 78976-44-0 CAPLUS
CN 1-Phtalazinamine, N-(3-chlorophenyl)-6(or 7)-methyl-4-phenyl- (9CI) (CA
INDEX NAME)



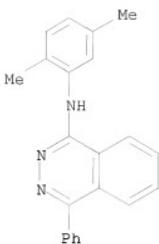
D1-Me

RN 78976-45-1 CAPLUS
CN 1-Phthalazinamine, 6(or 7)-methyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]-
(9CI) (CA INDEX NAME)



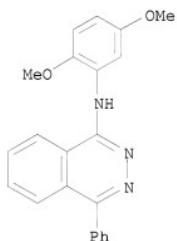
D1-Me

RN 78976-46-2 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6(or 7)-methyl-4-phenyl- (9CI)
(CA INDEX NAME)



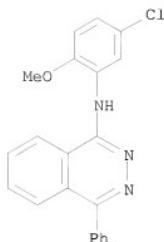
D1-Me

RN 78976-47-3 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6(or 7)-methyl-4-phenyl- (9CI)
(CA INDEX NAME)



D1-Me

RN 78976-48-4 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6(or 7)-methyl-4-phenyl- (9CI) (CA INDEX NAME)



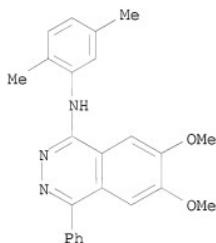
D1-Me

IT 78352-54-2P 78352-55-3P 78352-56-4P
 78352-57-5P 78352-59-7P 78352-61-1P
 78352-64-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

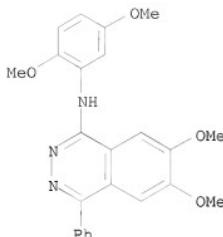
RN 78352-54-2 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)

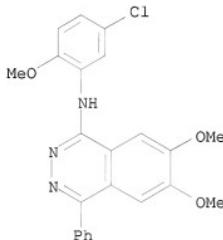


RN 78352-55-3 CAPLUS

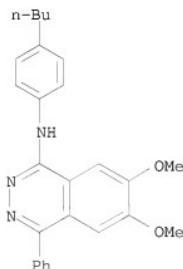
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



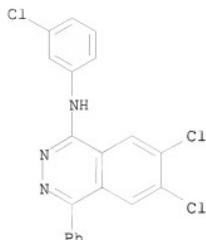
RN 78352-56-4 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6,7-dimethoxy-4-phenyl-
(CA INDEX NAME)



RN 78352-57-5 CAPLUS
CN 1-Phthalazinamine, N-(4-butylphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX
NAME)

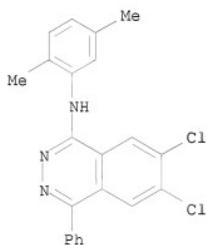


RN 78352-59-7 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-N-(3-chlorophenyl)-4-phenyl- (CA INDEX
NAME)



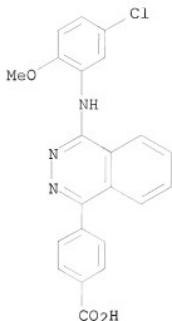
RN 78352-61-1 CAPLUS

CN 1-Phthalazinamine, 6,7-dichloro-N-(2,5-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



RN 78352-64-4 CAPLUS

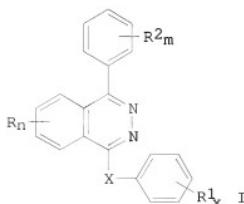
CN Benzoic acid, 4-[(5-chloro-2-methoxyphenyl)amino]-1-phthalazinyl- (CA INDEX NAME)



L6 ANSWER 95 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1981:462249 CAPLUS
 DOCUMENT NUMBER: 95:62249
 ORIGINAL REFERENCE NO.: 95:10519a,10522a
 TITLE: 4-Phenylphthalazine derivatives and drugs containing them
 INVENTOR(S): Hayashi, Eisaku; Oishi, Etsuo; Marinaka, Yasuhiro;
 Mori, Motokuni; Kanayama, Toshiji
 PATENT ASSIGNEE(S): Mitsubishi Yuka Yakuhin Co., Ltd., Japan
 SOURCE: Ger. Offen., 52 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| DE 3038166 | A1 | 19810521 | DE 1980-3038166 | 19801009 |
| JP 57048972 | A | 19820320 | JP 1980-124644 | 19800910 |
| JP 63034871 | B | 19880712 | | |

PRIORITY APPLN. INFO.: JP 1980-124644 A 19800910
 GI



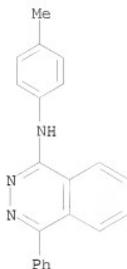
AB The title compds. [I; X = O, NH; R-R2 = alkyl, alkoxy, halogen, (esterified) CO2H, CN, acyl, OH, CF3; m, m, x = 0-3] and their salts were prepared for use as blood platelet aggregation inhibitors (test data tabulated). Thus, a mixture of 1-chloro-4-phenylphthalazine, 4-MeC6H4NH2, and powdered Cu was heated at 100° to give 29% I (Rn = R2m = H, R1x = 4-Me, X = NH).

IT 78351-61-8P 78351-62-9P 78351-63-0P
78351-64-1P 78351-65-2P 78351-66-3P
78351-67-4P 78351-68-5P 78351-69-6P
78351-70-9P 78351-71-0P 78351-72-1P
78351-73-2P 78351-74-3P 78351-75-4P
78351-76-5P 78351-77-6P 78351-81-2P
78351-82-3P 78351-83-4P 78351-84-5P
78351-86-7P 78351-89-0P 78351-90-3P
78351-91-4P 78351-92-5P 78351-95-8P
78352-00-8P 78352-01-9P 78352-02-0P
78352-03-1P 78352-04-2P 78352-05-3P
78352-06-4P 78352-07-5P 78352-08-6P
78352-09-7P 78352-10-0P 78352-11-1P
78352-12-2P 78352-13-3P 78352-14-4P
78352-15-5P 78352-16-6P 78352-17-7P
78352-18-8P 78352-19-9P 78352-20-2P
78352-21-3P 78352-22-4P 78352-23-5P
78352-24-6P 78352-25-7P 78352-26-8P
78352-27-9P 78352-28-0P 78352-29-1P
78352-30-4P 78352-31-5P 78352-32-6P
78352-33-7P 78352-34-8P 78352-35-9P
78352-36-0P 78352-37-1P 78352-38-2P
78352-39-3P 78352-40-6P 78352-41-7P
78352-42-8P 78352-43-9P 78352-44-0P
78352-45-1P 78352-46-2P 78352-47-3P
78352-48-4P 78352-49-5P 78352-50-8P
78352-51-9P 78352-52-0P 78352-53-1P
78352-58-6P 78352-59-7P 78352-60-0P
78352-62-2P 78352-63-3P 78352-64-4P
78352-65-5P 78352-66-6P 78352-67-7P
78352-68-8P 78361-49-6P 78361-50-9P
78361-51-0P 78361-52-1P

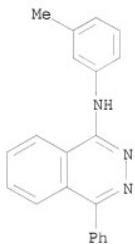
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and anticoagulant activity of)

RN 78351-61-8 CAPLUS

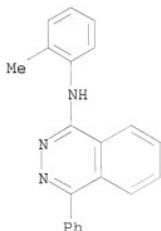
CN 1-Phthalazinamine, N-(4-methylphenyl)-4-phenyl- (CA INDEX NAME)



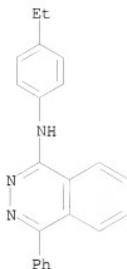
RN 78351-62-9 CAPLUS
CN 1-Phthalazinamine, N-(3-methylphenyl)-4-phenyl- (CA INDEX NAME)



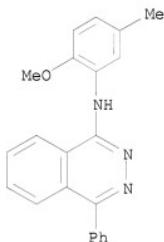
RN 78351-63-0 CAPLUS
CN 1-Phthalazinamine, N-(2-methylphenyl)-4-phenyl- (CA INDEX NAME)



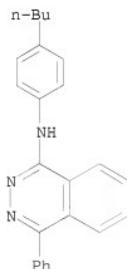
RN 78351-64-1 CAPLUS
CN 1-Phthalazinamine, N-(4-ethylphenyl)-4-phenyl- (CA INDEX NAME)



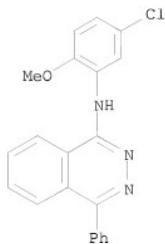
RN 78351-65-2 CAPLUS
CN 1-Phthalazinamine, N-(2-methoxy-5-methylphenyl)-4-phenyl- (CA INDEX NAME)



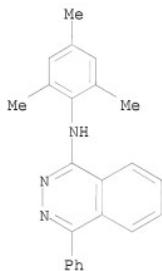
RN 78351-66-3 CAPLUS
CN 1-Phthalazinamine, N-(4-butylphenyl)-4-phenyl- (CA INDEX NAME)



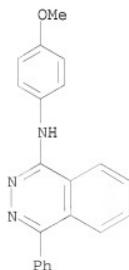
RN 78351-67-4 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



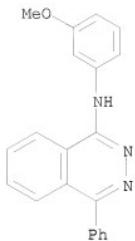
RN 78351-68-5 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



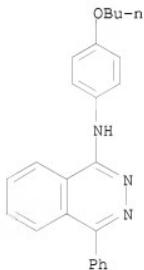
RN 78351-69-6 CAPLUS
CN 1-Phthalazinamine, N-(4-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



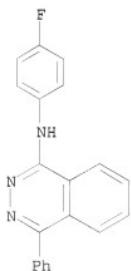
RN 78351-70-9 CAPLUS
CN 1-Phthalazinamine, N-(3-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



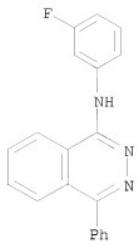
RN 78351-71-0 CAPLUS
CN 1-Phthalazinamine, N-(4-butoxyphenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-72-1 CAPLUS
CN 1-Phthalazinamine, N-(4-fluorophenyl)-4-phenyl- (CA INDEX NAME)

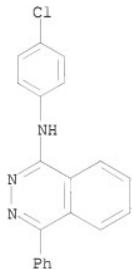


RN 78351-73-2 CAPLUS
CN 1-Phthalazinamine, N-(3-fluorophenyl)-4-phenyl- (CA INDEX NAME)



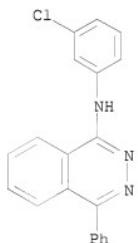
RN 78351-74-3 CAPLUS

CN 1-Phthalazinamine, N-(4-chlorophenyl)-4-phenyl- (CA INDEX NAME)



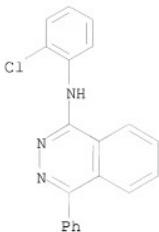
RN 78351-75-4 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)

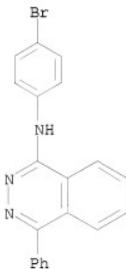


RN 78351-76-5 CAPLUS

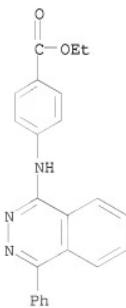
CN 1-Phthalazinamine, N-(2-chlorophenyl)-4-phenyl- (CA INDEX NAME)



RN 78351-77-6 CAPLUS
CN 1-Phthalazinamine, N-(4-bromophenyl)-4-phenyl- (CA INDEX NAME)

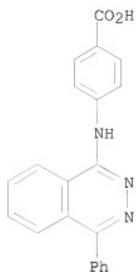


RN 78351-81-2 CAPLUS
CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]-, ethyl ester (CA INDEX NAME)



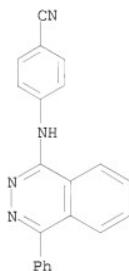
RN 78351-82-3 CAPLUS

CN Benzoic acid, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)



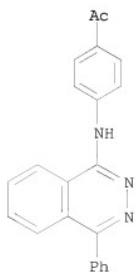
RN 78351-83-4 CAPLUS

CN Benzonitrile, 4-[(4-phenyl-1-phthalazinyl)amino]- (CA INDEX NAME)

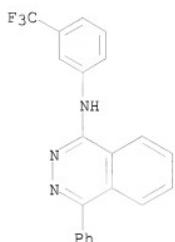


RN 78351-84-5 CAPLUS

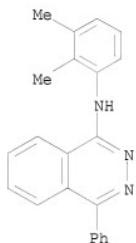
CN Ethanone, 1-[4-[(4-phenyl-1-phthalazinyl)amino]phenyl]- (CA INDEX NAME)



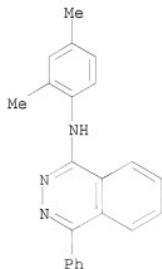
RN 78351-86-7 CAPLUS
CN 1-Phthalazinamine, 4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 78351-89-0 CAPLUS
CN 1-Phthalazinamine, N-(2,3-dimethylphenyl)-4-phenyl- (CA INDEX NAME)

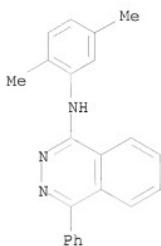


RN 78351-90-3 CAPLUS
CN 1-Phthalazinamine, N-(2,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



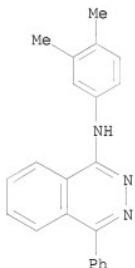
RN 78351-91-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



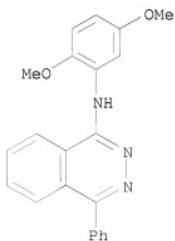
RN 78351-92-5 CAPLUS

CN 1-Phthalazinamine, N-(3,4-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



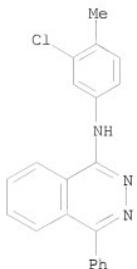
RN 78351-95-8 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-phenyl- (CA INDEX NAME)

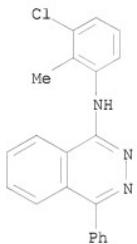


RN 78352-00-8 CAPLUS

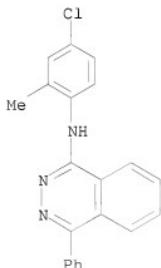
CN 1-Phthalazinamine, N-(3-chloro-4-methylphenyl)-4-phenyl- (CA INDEX NAME)



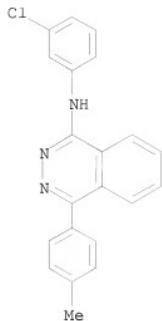
RN 78352-01-9 CAPLUS
CN 1-Phthalazinamine, N-(3-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)



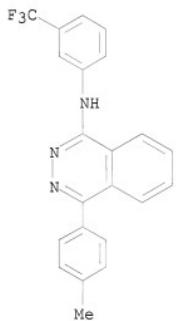
RN 78352-02-0 CAPLUS
CN 1-Phthalazinamine, N-(4-chloro-2-methylphenyl)-4-phenyl- (CA INDEX NAME)



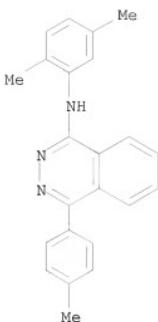
RN 78352-03-1 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



RN 78352-04-2 CAPLUS
CN 1-Phthalazinamine, 4-(4-methylphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

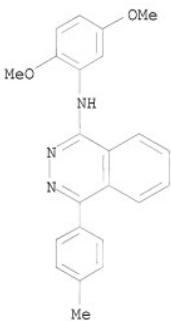


RN 78352-05-3 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



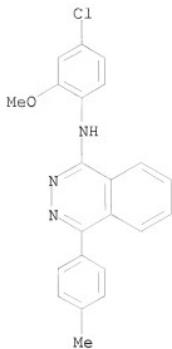
RN 78352-06-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



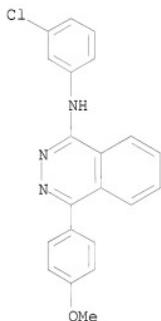
RN 78352-07-5 CAPLUS

CN 1-Phthalazinamine, N-(4-chloro-2-methoxyphenyl)-4-(4-methylphenyl)- (CA INDEX NAME)



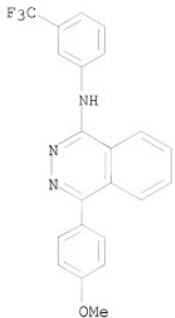
RN 78352-08-6 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



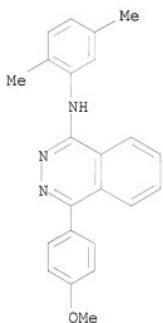
RN 78352-09-7 CAPLUS

CN 1-Phthalazinamine, 4-(4-methoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



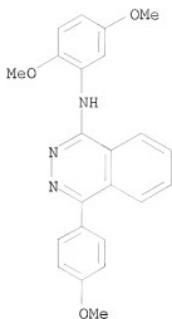
RN 78352-10-0 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



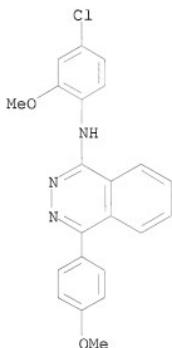
RN 78352-11-1 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



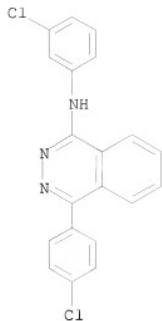
RN 78352-12-2 CAPLUS

CN 1-Phthalazinamine, N-(4-chloro-2-methoxyphenyl)-4-(4-methoxyphenyl)- (CA INDEX NAME)



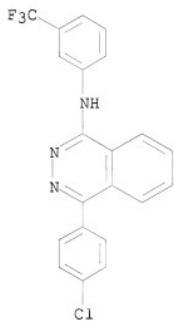
RN 78352-13-3 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-chlorophenyl)- (CA INDEX NAME)



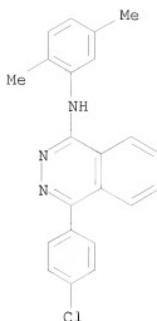
RN 78352-14-4 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



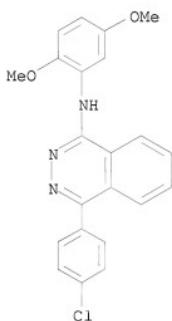
RN 78352-15-5 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



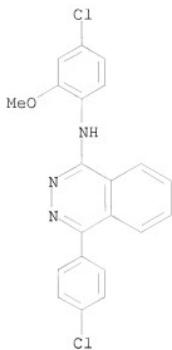
RN 78352-16-6 CAPLUS

CN 1-Phthalazinamine, 4-(4-chlorophenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



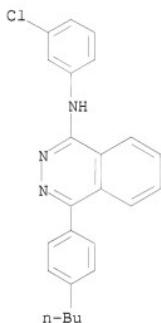
RN 78352-17-7 CAPLUS

CN 1-Phthalazinamine, N-(4-chloro-2-methoxyphenyl)-4-(4-chlorophenyl)- (CA INDEX NAME)



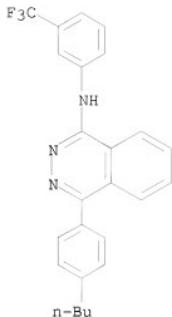
RN 78352-18-8 CAPLUS

CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(3-chlorophenyl)- (CA INDEX NAME)

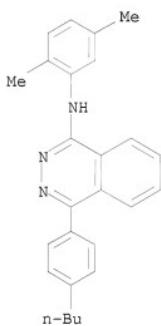


RN 78352-19-9 CAPLUS

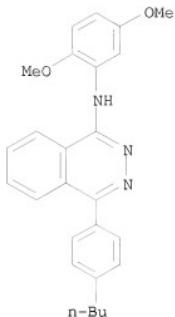
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 78352-20-2 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)

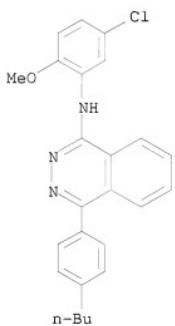


RN 78352-21-3 CAPLUS
CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



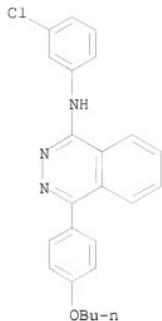
RN 78352-22-4 CAPLUS

CN 1-Phthalazinamine, 4-(4-butylphenyl)-N-(5-chloro-2-methoxyphenyl)- (CA INDEX NAME)

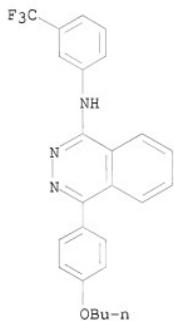


RN 78352-23-5 CAPLUS

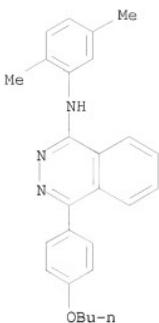
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(3-chlorophenyl)- (CA INDEX NAME)



RN 78352-24-6 CAPLUS
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

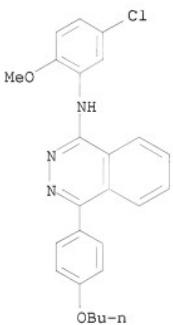


RN 78352-25-7 CAPLUS
CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)



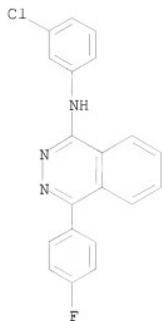
RN 78352-26-8 CAPLUS

CN 1-Phthalazinamine, 4-(4-butoxyphenyl)-N-(5-chloro-2-methoxyphenyl)- (CA INDEX NAME)



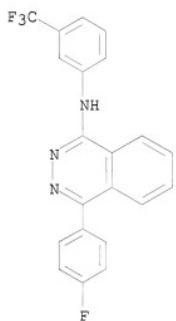
RN 78352-27-9 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



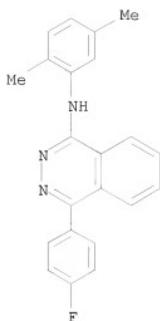
RN 78352-28-0 CAPLUS

CN 1-Phthalazinamine, 4-(4-fluorophenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



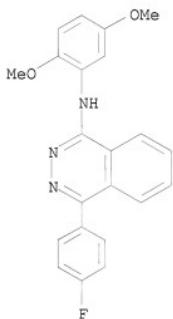
RN 78352-29-1 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



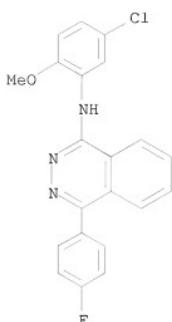
RN 78352-30-4 CAPLUS

CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



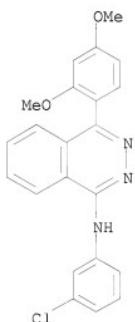
RN 78352-31-5 CAPLUS

CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(4-fluorophenyl)- (CA INDEX NAME)



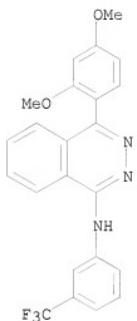
RN 78352-32-6 CAPLUS

CN 1-Phthalazinamine, N-(3-chlorophenyl)-4-(2,4-dimethoxyphenyl)- (CA INDEX NAME)

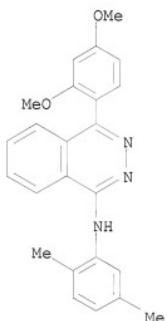


RN 78352-33-7 CAPLUS

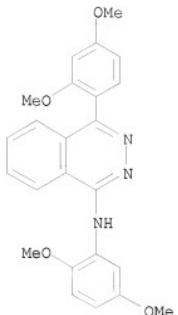
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 78352-34-8 CAPLUS
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)

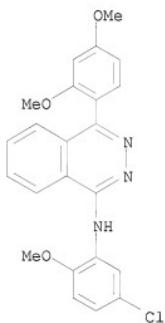


RN 78352-35-9 CAPLUS
CN 1-Phthalazinamine, 4-(2,4-dimethoxyphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



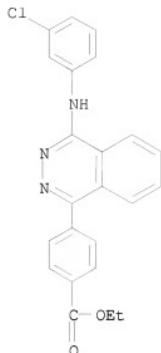
RN 78352-36-0 CAPLUS

CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-4-(2,4-dimethoxyphenyl)-
(CA INDEX NAME)

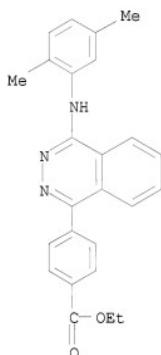


RN 78352-37-1 CAPLUS

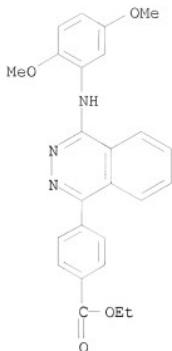
CN Benzoic acid, 4-[(3-chlorophenyl)amino]-1-phthalazinyl-, ethyl ester
(CA INDEX NAME)



RN 78352-38-2 CAPLUS
CN Benzoic acid, 4-[4-[(2,5-dimethylphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)

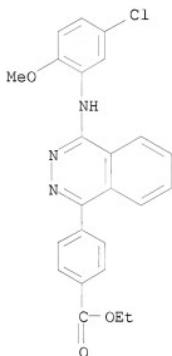


RN 78352-39-3 CAPLUS
CN Benzoic acid, 4-[4-[(2,5-dimethoxyphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



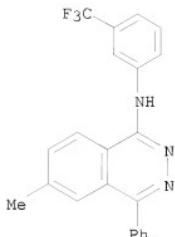
RN 78352-40-6 CAPLUS

CN Benzoic acid, 4-[4-[(5-chloro-2-methoxyphenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)

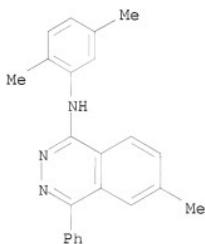


RN 78352-41-7 CAPLUS

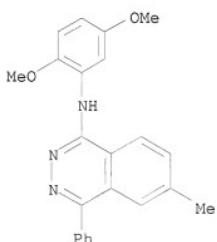
CN 1-Phthalazinamine, 6-methyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



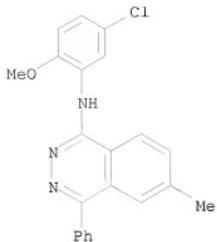
RN 78352-42-8 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



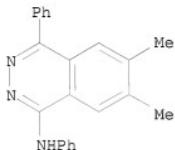
RN 78352-43-9 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



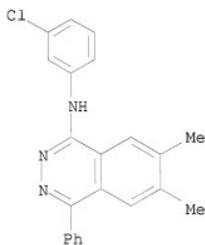
RN 78352-44-0 CAPLUS
CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



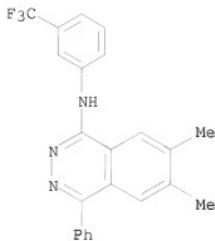
RN 78352-45-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethyl-N,4-diphenyl- (CA INDEX NAME)



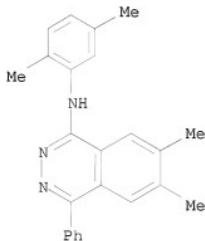
RN 78352-46-2 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



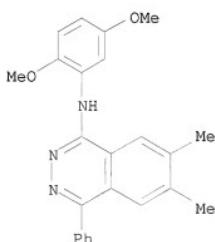
RN 78352-47-3 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



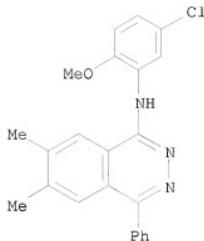
RN 78352-48-4 CAPLUS
 CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



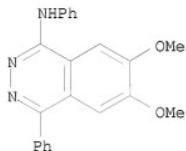
RN 78352-49-5 CAPLUS
 CN 1-Phthalazinamine, N-(2,5-dimethoxyphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



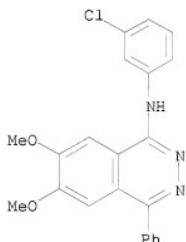
RN 78352-50-8 CAPLUS
 CN 1-Phthalazinamine, N-(5-chloro-2-methoxyphenyl)-6,7-dimethyl-4-phenyl- (CA INDEX NAME)



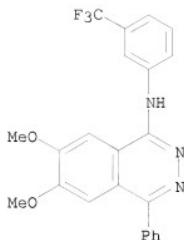
RN 78352-51-9 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethoxy-N,4-diphenyl- (CA INDEX NAME)



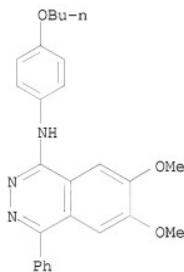
RN 78352-52-0 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



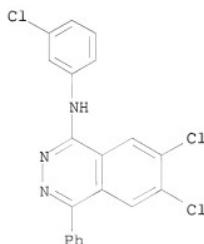
RN 78352-53-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dimethoxy-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



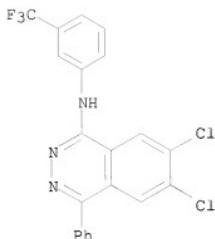
RN 78352-58-6 CAPLUS
CN 1-Phthalazinamine, N-(4-butoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



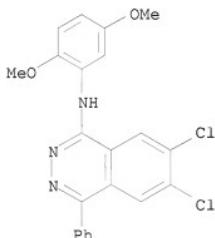
RN 78352-59-7 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-N-(3-chlorophenyl)-4-phenyl- (CA INDEX NAME)



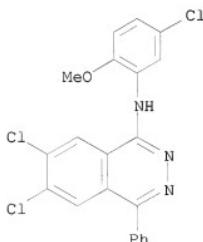
RN 78352-60-0 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



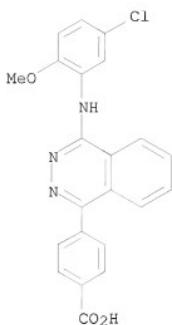
RN 78352-62-2 CAPLUS
 CN 1-Phthalazinamine, 6,7-dichloro-N-(2,5-dimethoxyphenyl)-4-phenyl- (CA INDEX NAME)



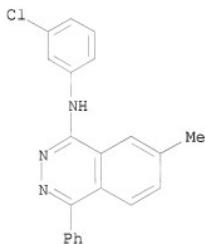
RN 78352-63-3 CAPLUS
 CN 1-Phthalazinamine, 6,7-dichloro-N-(5-chloro-2-methoxyphenyl)-4-phenyl- (CA INDEX NAME)



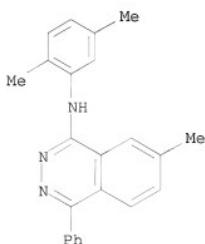
RN 78352-64-4 CAPLUS
 CN Benzoic acid, 4-[4-[(5-chloro-2-methoxyphenyl)amino]-1-phthalazinyl]- (CA INDEX NAME)



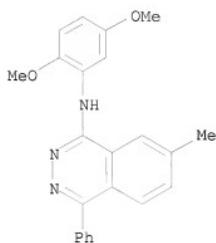
RN 78352-65-5 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



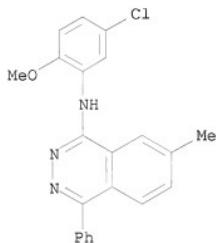
RN 78352-66-6 CAPLUS
CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



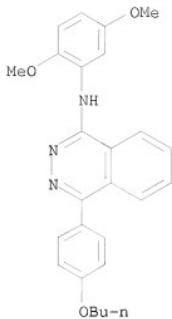
RN 78352-67-7 CAPLUS
CN 1-Phtalazinamine, N-(2,5-dimethoxyphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



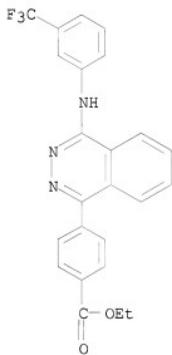
RN 78352-68-8 CAPLUS
CN 1-Phtalazinamine, N-(5-chloro-2-methoxyphenyl)-7-methyl-4-phenyl- (CA INDEX NAME)



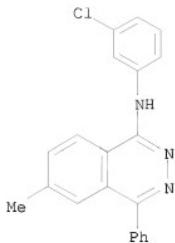
RN 78361-49-6 CAPLUS
CN 1-Phtalazinamine, 4-(4-butoxyphenyl)-N-(2,5-dimethoxyphenyl)- (CA INDEX NAME)



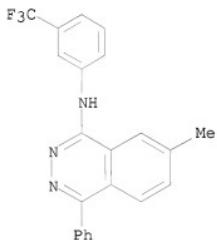
RN 78361-50-9 CAPLUS
CN Benzoic acid, 4-[4-[(3-(trifluoromethyl)phenyl)amino]-1-phthalazinyl]-, ethyl ester (CA INDEX NAME)



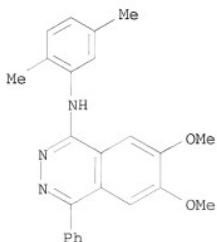
RN 78361-51-0 CAPLUS
CN 1-Phthalazinamine, N-(3-chlorophenyl)-6-methyl-4-phenyl- (CA INDEX NAME)



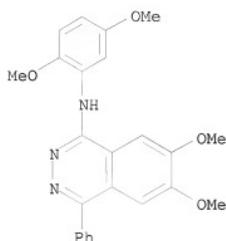
RN 78361-52-1 CAPLUS
 CN 1-Phthalazinamine, 7-methyl-4-phenyl-N-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



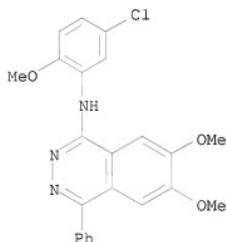
IT 78352-54-2P 78352-55-3P 78352-56-4P
 78352-57-5P 78352-61-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 78352-54-2 CAPLUS
 CN 1-Phthalazinamine, N-(2,5-dimethylphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



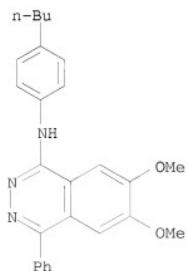
RN 78352-55-3 CAPLUS
CN 1-Phtalazinamine, N-(2,5-dimethoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



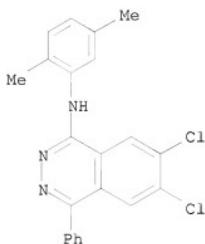
RN 78352-56-4 CAPLUS
CN 1-Phtalazinamine, N-(5-chloro-2-methoxyphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



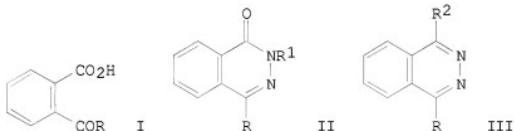
RN 78352-57-5 CAPLUS
CN 1-Phtalazinamine, N-(4-butylphenyl)-6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



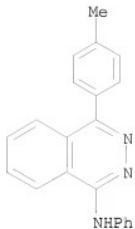
RN 78352-61-1 CAPLUS
CN 1-Phthalazinamine, 6,7-dichloro-N-(2,5-dimethylphenyl)-4-phenyl- (CA INDEX NAME)



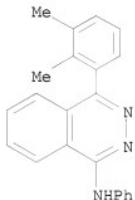
L6 ANSWER 96 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1981:139721 CAPLUS
DOCUMENT NUMBER: 94:139721
ORIGINAL REFERENCE NO.: 94:22877a,22880a
TITLE: Synthesis and reactions of phthalazine derivatives
AUTHOR(S): Merchant, J. R.; Kulkarni, S. D.; Venkatesh, M. S.
CORPORATE SOURCE: Dep. Org. Chem., Inst. Sci., Bombay, 400 032, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1980), 19B(10), 914-16
DOCUMENT TYPE: CODEN: IJSBDB; ISSN: 0376-4699
LANGUAGE: Journal
OTHER SOURCE(S): English
GI: CASREACT 94:139721



AB Treating o-arylbenzoic acids I ($R = \text{Ph}, 4\text{-MeC}_6\text{H}_4, 2,3\text{-Me}_2\text{C}_6\text{H}_3$) with N_2H_4 gave II ($R_1 = \text{H}$), chlorination of which gave III ($R_2 = \text{Cl}$). III ($R_2 = \text{XR}_3; X = \text{O}, \text{S}; R_3 = \text{Ph}, 2-, 3-, 4\text{-MeC}_6\text{H}_4, 2,3-, 2,4-, 3,4\text{-Me}_2\text{C}_6\text{H}_3$) were prepared by treating III ($R_2 = \text{Cl}$) with R_3XH . Cyanoethylation of III ($R_2 = \text{Cl}$) with $\text{CH}_2:\text{CHCN}$ gave II ($R_1 = \text{CH}_2\text{CH}_2\text{CN}$), which were hydrolyzed to II ($R_1 = \text{CH}_2\text{CH}_2\text{CO}_2\text{H}$).
IT 76972-84-4P 76972-88-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 76972-84-4 CAPLUS
CN 1-Phthalazinamine, 4-(4-methylphenyl)-N-phenyl- (CA INDEX NAME)



RN 76972-88-8 CAPLUS
CN 1-Phthalazinamine, 4-(2,3-dimethylphenyl)-N-phenyl- (CA INDEX NAME)



L6 ANSWER 97 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1973:124637 CAPLUS
DOCUMENT NUMBER: 78:124637
ORIGINAL REFERENCE NO.: 78:20031a,20034a
TITLE: Antiinflammatory aminophthalazines
INVENTOR(S): Rodway, Ronald Ernest; Simmonds, Robin George
PATENT ASSIGNEE(S): Aspro-Nicholas Ltd.
SOURCE: Brit., 6 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| ----- | ---- | ----- | ----- | ----- |
| GB 1303061 | A | 19730117 | GB 1969-22678 | 19690501 |
| PRIORITY APPLN. INFO.: | | | GB 1969-22678 | A 19690501 |

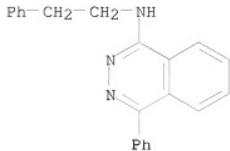
GI For diagram(s), see printed CA Issue.

AB Fourteen of the title compds. (*I*, R = Ph, PhCH₂, p-ClC₆H₄; R₁, R₂ = H, alkyl, substituted alkyl) were prepared from the appropriate 1-chlorophthalazines and amines. E.g., 15 g 1-chloro-4-phenylphthalazine and 100 ml Me₂NH in 60 ml EtOH at 90° for 5 hr gave 12.9 g *I* (R = Ph, R₁ = R₂ = Me). *I*-containing compds. were described.

IT RL: SPN (Synthetic preparation); PREP (Preparation)
23099-93-6P 23099-94-7P

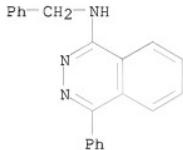
(preparation of
BN 23099-93-6 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-(2-phenylethyl)- (CA INDEX NAME)



RN 23099-94-7 CAPLUS

CN 1-Phthalazinamine, 4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)



L6 ANSWER 98 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1971:22865 CAPLUS

DOCUMENT NUMBER: 74:22865

ORIGINAL REFERENCE NO.: 74:3703a,3706a

TITLE: Pharmaceutical 1-amino-4-phenylphthalazines

INVENTOR(S): Rodway, Ronald E.; Simmonds, Robin G.

PATENT ASSIGNEE(S): Aspro-Nicholas Ltd.

SOURCE: Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

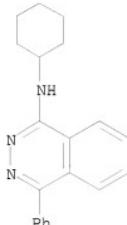
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|------------|
| DE 2021195 | A | 19701112 | DE 1970-2021195 | 19700430 |
| GB 1293565 | A | 19721018 | GB 1969-22679 | 19690503 |
| FR 2043504 | A5 | 19710219 | FR 1970-15663 | 19700429 |
| FR 2043504 | A1 | 19710219 | | |
| SE 376916 | B | 19750616 | SE 1970-5984 | 19700429 |
| BE 749824 | A | 19701030 | BE 1970-749824 | 19700430 |
| US 3753988 | A | 19730821 | US 1970-33506 | 19700430 |
| CH 523890 | A | 19720615 | CH 1970-523890 | 19700502 |
| JP 48039944 | B | 19731128 | JP 1970-38184 | 19700504 |
| | | | GB 1969-22679 | A 19690503 |

PRIORITY APPLN. INFO.:

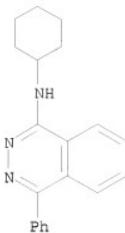
GI For diagram(s), see printed CA Issue.

AB Antiinflammatory and antirheumatic title compds. (I, X = substituted piperazinyl, amino, piperidinyl; R = aryl) were prepared by refluxing I (X = Cl) with the bases or their salts in organic solvents. Thus, I (X = Cl, R = Ph) and N-(β-hydroxyethyl)piperazine in anhydrous dioxane gave 79% II (X = 4-β-hydroxyethyl-1-piperazinyl, R = Ph) (II). Among 38 I similarly prepared were (X, R, and % yield given): 4-methyl-1-piperazinyl, Ph, 72; 3-morpholinopropylamino, Ph, 78;

4- β -hydroxyethyl-1-piperazinyl, p-ClC₆H₄, 64; 1-piperidinyl, Ph, 55;
cyclopropylamino, PhCH₂, -. II was used in 10-250 mg doses in
pharmaceutical preps.
IT 30181-87-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 30181-87-4 CAPLUS
CN 1-Phthalazinamine, N-cyclohexyl-4-phenyl- (CA INDEX NAME)



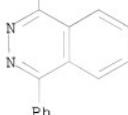
L6 ANSWER 99 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1969:422093 CAPLUS
DOCUMENT NUMBER: 71:22093
ORIGINAL REFERENCE NO.: 71:4077a,4080a
TITLE: 1-Substituted 4-aryl-(or 4-aralkyl-)phthalazines
AUTHOR(S): Holava, H. M., Jr.; Partyka, R. A.
CORPORATE SOURCE: Bristol Lab. Div., Bristol-Myers Co., Syracuse, NY,
USA
SOURCE: Journal of Medicinal Chemistry (1969), 12, 555-6
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The anorexic and antiinflammatory potential of 1-substituted 4-aryl-(or
4-aralkyl-)phthalazines (I), prepared by the reaction of an amine with the
appropriate chlorophthalazine, was investigated.
IT 23092-45-7P 23099-93-6P 23099-94-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 23092-45-7 CAPLUS
CN 1-Phthalazinamine, N-cyclohexyl-4-phenyl-, hydrochloride (1:1) (CA INDEX
NAME)



● HCl

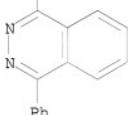
RN 23099-93-6 CAPLUS
 CN 1-Phthalazinamine, 4-phenyl-N-(2-phenylethyl)- (CA INDEX NAME)

Ph—CH₂—CH₂—NH



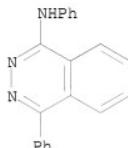
RN 23099-94-7 CAPLUS
 CN 1-Phthalazinamine, 4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

Ph—CH₂—NH

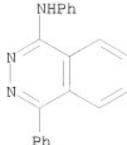


L6 ANSWER 100 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1967:490750 CAPLUS
 DOCUMENT NUMBER: 67:90750
 ORIGINAL REFERENCE NO.: 67:17083a,17086a
 TITLE: Phthalazines. II.
 1-(Methylsulfonyl)-4-phenylphthalazine
 AUTHOR(S): Hayashi, Eisaku; Higashino, Takeo; Oishi, Etsuo; Sano, Masaru
 CORPORATE SOURCE: Shizuoka Coll. Pharm., Shizuoka, Japan
 SOURCE: Yakugaku Zasshi (1967), 87(6), 687-8
 CODEN: YKKZAJ; ISSN: 0031-6903
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese

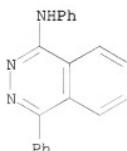
GI For diagram(s), see printed CA Issue.
 AB cf. CA 65: 15373h. 1-(Methylthio)-4-phenylphthalazine (I) (3.5 g.) in 75 ml. AcOH is treated with 7% aqueous solution of KMnO₄, decolorized with 10% NaHSO₃, diluted with H₂O, and the precipitate is recrystd. (MeOH) to give 3.4 g.
 1-(methylsulfonyl)-4-phenylphthalazine (II), m. 210-12°. The use of H₂O₂ instead of KMnO₄ in the oxidation of I did not give II but rather 68% 4-phenyl-1(2H)-phthalazinone (III), m. 236° (MeOH-CHCl₃). Heating II with alkali or acid also gives III. Heating 0.3 g. II in 10 ml. MeOH with a methanolic solution of MeONa under reflux 15 min. gives 0.15 g. 1-methoxy-4-phenylphthalazine, m. 137-8° (petroleum ether). The heating of 0.2 g. II with 0.15 g. PhNH₂ 2 hrs. at 100° gives 0.1 g. 1-anilino-4-phenylphthalazine, m. 230.5-1° (MeOH).
 IT 10132-04-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 10132-04-4 CAPLUS
 CN 1-Phthalazinamine, N,4-diphenyl- (CA INDEX NAME)



L6 ANSWER 101 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1966:482254 CAPLUS
 DOCUMENT NUMBER: 65:82254
 ORIGINAL REFERENCE NO.: 65:15374b-d
 TITLE: 4 - (p - Aminobenzenesulfonamido) -
 2,6-dimethoxypyrimidine
 AUTHOR(S): Zasosov, V. A.; Kolgina, N. M.; Volzhina, O. N.;
 Bushueva, K. S.; Traven, N. I.
 CORPORATE SOURCE: Sci. Res. Chem.-Pharm. Inst., Moscow
 SOURCE: Meditsinskaya Promyshlennost SSSR (1966), 20(4), 9-13
 DOCUMENT TYPE: CODEN: MPSSA9; ISSN: 0369-1586
 LANGUAGE: Journal
 Russian
 AB An improved preparation of 4-(p-aminobenzenesulfonamido)-2,6-dimethoxypyrimidine (I) was described. 4-Amino-2,6-dihydroxypyrimidine and dimethylaniline was treated with an excess of POCl₃ at 35°, refluxed 2 hrs.; after cooling, NH₄OH was added (pH 3.5-3.8) and boiled 1 hr., to yield 72% 4-amino-2,6-dichloropyrimidine (II). Refluxing II in methanolic KOH 20 hrs. led to 83% 4-amino-2,6-dimethoxypyrimidine, m. 144-7°, which treated with Me p-chlorosulfonylcarbanilate in C₅H₅N 2 hrs. at 20° and 2 hrs. at 55-7° yielded 92% 4-(p-carbomethoxyaminobenzenesulfonamido)-2,6-dimethoxypyrimidine (III), m. 202-4°. The hydrolysis of III with 4% NaOH 1 hr. at 90° gave 84.6% I, m. 200-2°.
 IT 10132-04-4
 (Derived from data in the 7th Collective Formula Index (1962-1966))
 RN 10132-04-4 CAPLUS
 CN 1-Phthalazinamine, N,4-diphenyl- (CA INDEX NAME)



L6 ANSWER 102 OF 102 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1966:482253 CAPLUS
 DOCUMENT NUMBER: 65:82253
 ORIGINAL REFERENCE NO.: 65:15373h,15374a-b
 TITLE: Phthalazines. I. N-Oxidation of 1-phenylphthalazine
 and chemical properties of 1-phenylphthalazine 3-oxide
 AUTHOR(S): Hayashi, Eisaku; Oishi, Etsuo
 CORPORATE SOURCE: Coll. Pharm., Shizuoka, Japan
 SOURCE: Yakugaku Zasshi (1966), 86(7), 576-84
 CODEN: YKKZAJ; ISSN: 0031-6903
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
AB Reaction of monoperphthalic acid and 1-phenylphthalazine affords only 1 kind of monoxide, i.e. 1-phenylphthalazine 3-oxide (I), yellow, m. 181-3° (CHCl₃-ligroine). Treatment of I with phosphoryl and sulfonyl chloride produces the expected 1-chloro-4-phenylphthalazine (II), pale yellow plates, m. 160-1°, in 74 and 46% yields, resp. I and Ac₂O failed to afford any product of known structure. Treatment of I with BzCl and KCN gives the expected 4-phenyl-1-phthalazinecarbonitrile, m. 180-2° (C₆H₆), while reaction of tosyl chloride and I in the presence of alkali gives the expected II and 4-phenyl-1-(2H)-phthalazinone, m. 236-7° (MeOH), but both in poor yields. Reaction of I and Ph isocyanate gives the expected 1-anilino-4-phenylphthalazine, m. 230-1° (C₆H₆), also in a poor yield. I and PhMgBr gives 1,4-diphenylphthalazine, yellow needles, m. 188-90° (C₆H₆-ligroine) in 23% yield. Similarly, I and iso-PrMgBr yields 26% 1-isopropyl-4-phenylphthalazine 2-oxide, m. 169-70° (C₆H₆-ligroine). In the above reactions, the poor yields of the expected products were accompanied in majority of cases with viscous substance of unknown structure.
IT 10132-04-4P, Phthalazine, 1-anilino-4-phenyl-
RL: PREP (Preparation)
 (preparation of)
RN 10132-04-4 CAPLUS
CN 1-Phthalazinamine, N,4-diphenyl- (CA INDEX NAME)



=> file reg
 COST IN U.S. DOLLARS

SINCE FILE TOTAL

| | | |
|--|-------------------------------|----------------------------|
| FULL ESTIMATED COST | ENTRY
589.16 | SESSION
775.74 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE
ENTRY
-84.46 | TOTAL
SESSION
-84.46 |
| CA SUBSCRIBER PRICE | | |

FILE 'REGISTRY' ENTERED AT 08:35:21 ON 30 MAR 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 27 MAR 2009 HIGHEST RN 1128305-29-2
DICTIONARY FILE UPDATES: 27 MAR 2009 HIGHEST RN 1128305-29-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

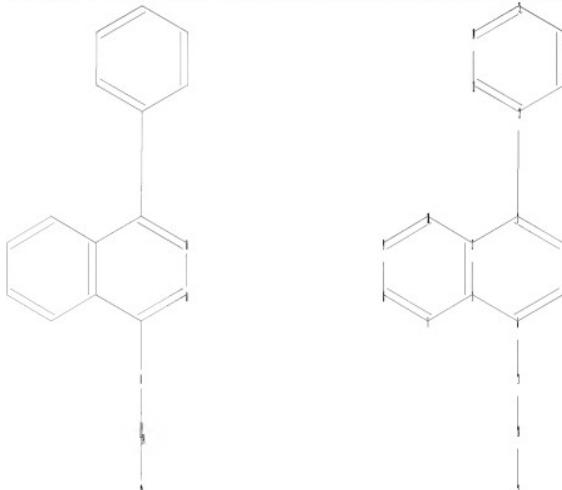
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>
Uploading C:\Program Files\STNEXP\Queries\10552340s2.str



chain nodes :
11 18 21
ring nodes :
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17
chain bonds :
3-12 6-11 11-18 18-21
ring bonds :
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17
exact/norm bonds :
6-11 11-18
exact bonds :
3-12 18-21
normalized bonds :
1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 21:Atom
Generic attributes :
21:
Saturation : Saturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

Element Count :
Node 21: Limited
C,C6

L7 STRUCTURE UPLOADED

=> d 17
L7 HAS NO ANSWERS
L7 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 17 sss sam
SAMPLE SEARCH INITIATED 08:35:40 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 677 TO ITERATE

100.0% PROCESSED 677 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

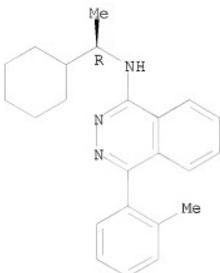
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
PROJECTED ITERATIONS: 11979 TO 15101
PROJECTED ANSWERS: 1 TO 80

L8 1 SEA SSS SAM L7

=> d scan

L8 1 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-(2-methylphenyl)-, (R)- (9CI)
MF C23 H27 N3

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s 17 sss full
FULL SEARCH INITIATED 08:36:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 13784 TO ITERATE

100.0% PROCESSED 13784 ITERATIONS 12 ANSWERS
SEARCH TIME: 00.00.01

L9 12 SEA SSS FUL L7

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 185.88 961.62

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE 0.00 -84.46

FILE 'CAPLUS' ENTERED AT 08:36:07 ON 30 MAR 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 30 Mar 2009 VOL 150 ISS 14
FILE LAST UPDATED: 29 Mar 2009 (20090329/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

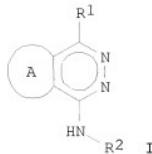
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 19
L10 6 L9

=> d ibib abs hitstr 1-6

L10 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:644166 CAPLUS
DOCUMENT NUMBER: 147:64566
TITLE: Novel activator of nuclear orphan receptor and use thereof
INVENTOR(S): Shimizu, Toshiyuki; Niwa, Takuro; Chiba, Kan;
Hosokawa, Masakiyo; Kobayashi, Kaoru
PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan; National
University Corporation Chiba University
SOURCE: PCT Int. Appl., 24pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|------------------|------------------|------------|
| WO 2007066615 | A1 | 20070614 | WO 2006-JP324171 | 20061204 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
KP, KR, KZ, LA, LC, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM | | | | |
| PRIORITY APPLN. INFO.: | | | JP 2005-350440 | A 20051205 |
| OTHER SOURCE(S): | | MARPAT 147:64566 | | |
| GI | | | | |



AB Disclosed is a compound represented by the general formula (I) or a pharmaceutically acceptable salt thereof or a solvate of the compound or the salt, which can be used as a pregnane receptor activator. (I) wherein R1 represents a cyclohexyl group, a Ph group which may have at least one substituent selected from a C1-C4 alkyl group, a C1-C4 alkoxy group and a halogen atom, a thiienyl group which may have at least one substituent selected from a C1-C4 alkyl group, a C1-C4 alkoxy group and a halogen atom, a furyl group which may have at least one substituent selected from a C1-C4 alkyl group, a C1-C4 alkoxy group and a halogen atom, a thiazolyl group, a phenoxy group, a C1-C4 phenylalkyl group, a phenylthio group, a morpholinyl group, a piperidyl group, a pyrrolidinyl group, a pyridyl group, or an imidazolyl group; R2 represents -CHR3R4 (where R3 represents a hydrogen atom or a C1-C4 alkyl group; and R4 represents a C1-C4 alkyl group, a cyclohexyl group, a thiienyl group or a Ph group which may have at least one substituent selected from a C1-C4 alkyl group, a C1-C4 alkoxy group and a halogen atom) or a cyclohexyl group; and the ring A represents a benzene ring, a thiophene ring or a furan ring.

IT 149549-69-9 940953-91-3 940953-94-6

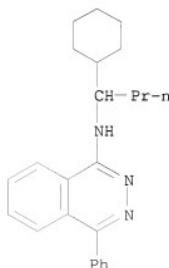
940953-95-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(novel activator of nuclear orphan receptor for treatment of liver, kidney, and metabolic diseases)

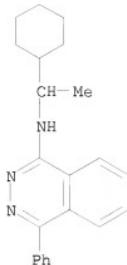
RN 149549-69-9 CAPLUS

CN 1-Phthalazinamine, N-(1-cyclohexylbutyl)-4-phenyl- (CA INDEX NAME)

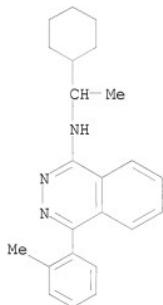


RN 940953-91-3 CAPLUS

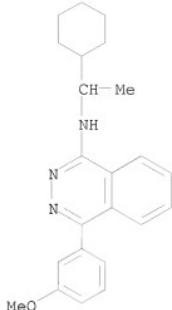
CN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-phenyl- (CA INDEX NAME)



RN 940953-94-6 CAPLUS
CN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-(2-methylphenyl)- (CA INDEX NAME)



RN 940953-95-7 CAPLUS
CN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-(3-methoxyphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:547472 CAPLUS
 DOCUMENT NUMBER: 1451:283985
 TITLE: Autoinduction of MKC-963 [(R)-1-(1-cyclohexylethylamino)-4-phenylphthalazine] metabolism in healthy volunteers and its retrospective evaluation using primary human hepatocytes and cDNA-expressed enzymes

AUTHOR(S): Shimizu, Toshiyuki; Akimoto, Kei; Yoshimura, Takuya; Niwa, Takuro; Kobayashi, Kaoru; Tsunoo, Michio; Chiba, Kan

CORPORATE SOURCE: Pharmacokinetics Laboratory, Mitsubishi Pharma Corporation, Chiba, Kisarazu-shi, Japan

SOURCE: Drug Metabolism and Disposition (2006), 34(6), 950-954

CODEN: DMDSAI; ISSN: 0090-9556

PUBLISHER: American Society for Pharmacology and Experimental Therapeutics

DOCUMENT TYPE: Journal

LANGUAGE: English

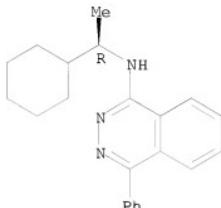
AB MKC-963, (R)-1-(1-cyclohexylethylamino)-4-phenylphthalazine, a potent inhibitor of platelet aggregation, was synthesized and used in clin. trials in the 1990s. In the process of clin. study, it was found that urinary excretion ratios for 6 β -hydroxycortisol and free cortisol increased significantly in parallel with decreases in the blood plasma concns. of MKC-963 after repeated oral administration of the compound to healthy volunteers. These findings suggested that MKC-963 caused autoinduction (defined as the ability of a drug to induce enzymes that enhance its own metabolism, resulting in dispositional tolerance) in humans, and clin. studies using the compound were stopped. This experience prompted us to reevaluate the effects of this compound on CYP3A4 using primary human hepatocytes and cDNA-expressed human cytochrome P 450 (P 450) enzymes to determine whether the autoinduction of MKC-963 metabolism in humans could be predicted if these in vitro systems had been used for the evaluation of MKC-963 in the preclin. study. The results of in vitro study showed that MKC-963 increased CYP3A4 mRNA expression level and activity of testosterone 6 β -hydroxylation to extents similar to those observed with rifampicin in primary human hepatocytes. In addition, approx. 90% of the MKC-963 metabolism in human liver microsomes was estimated to be attributable to

CYP3A4. These in vitro findings are in good agreement with the results of clin. study, suggesting that studies using human hepatocytes and cDNA-expressed human P450s are useful for assessing the autoinductive nature of compds. under development before starting clin. studies.

IT 149549-14-4, MKC 963
 RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (autoinduction of MKC-963 metabolism in healthy volunteers)

RN 149549-14-4 CAPLUS
 CN 1-Phthalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:872710 CAPLUS
 DOCUMENT NUMBER: 141:343540
 TITLE: Specific NAD(P)H oxidase inhibitor
 INVENTOR(S): Yamamoto, Toshihiro; Yamada, Kumi
 PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2004089412 | A1 | 20041021 | WO 2004-JP5065 | 20040408 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG | | | | |
| EP 1616576 | A1 | 20060118 | EP 2004-726653 | 20040408 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| US 20070082910 | A1 | 20070412 | US 2006-552340 | 20061212 |
| PRIORITY APPLN. INFO.: | | | JP 2003-103576 | A 20030408 |

OTHER SOURCE(S):

MARPAT 141:343540

AB An inhibitor for the hyperfunction of NAD(P)H oxidase containing a compound which substantially does not inhibit NADPH oxidase originating in leukocytes but inhibits NAD(P)H oxidase originating in tissues other than leukocytes, and a medicinal composition containing the same.

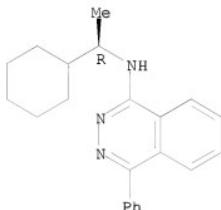
IT 149549-14-4 774233-42-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bicyclic pyridazine analogs as tissue specific NAD(P)H oxidase inhibitors for treatment of diseases)

RN 149549-14-4 CAPLUS

CN 1-Phtalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 774233-42-0 CAPLUS

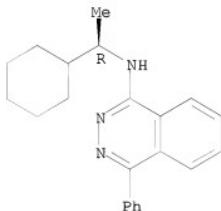
CN 1-Phtalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl-,
(2Z)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 149549-14-4

CMF C22 H25 N3

Absolute stereochemistry.

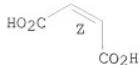


CM 2

CRN 110-16-7

CMF C4 H4 O4

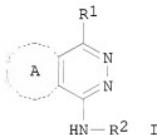
Double bond geometry as shown.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1998:256306 CAPLUS
 DOCUMENT NUMBER: 129:12748
 ORIGINAL REFERENCE NO.: 129:2639a,2642a
 TITLE: Diabetic neuropathy inhibitors containing aminopyridazine derivatives causing no hemorrhage
 INVENTOR(S): Suzuki, Hiroko; Yamada, Kumi
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|-----------------|----------|
| JP 10109936 | A | 19980428 | JP 1996-264356 | 19961004 |
| PRIORITY APPLN. INFO.: | | | JP 1996-264356 | 19961004 |
| OTHER SOURCE(S): | MARPAT | 129:12748 | | |
| GI | | | | |



AB Prophylactic and therapeutic agents for diabetic neuropathy contain the derivs. I [R1 = cyclohexyl or Ph, thiienyl, furyl, which may be substituted with ≥1 Cl-4 alkyl, Cl-4 alkoxy, halo; R2 = CHR3R4 (R3 = H, Cl-4 alkyl; R4 = Cl-4 alkyl, cyclohexyl, thiienyl, or Ph which may be substituted with ≥1 Cl-4 alkyl, Cl-4 alkoxy, halo), cycloalkyl which may be substituted with ≥1 Cl-4 alkoxy, C1-6 alkylene; ring A = benzene, thiophene, furan] or their pharmacol. acceptable salts as active ingredients. I show strong platelet aggregation-inhibiting action and cause no hemorrhage, and are especially useful for treatment of peripheral nerve disorders accompanied with diabetic complications in peripheral circulation, e.g. diabetic skin ulcer, arteriosclerosis obliterans, etc. (R)-1-(1-cyclohexylethylamino)-4-phenylphthalazine was prepared from 1-chloro-4-phenylphthalazine and (R)-(-)-1-cyclohexylethylamine, and converted into its fumarate (II). II significantly increased nerve conduction velocity in streptozotocin-induced diabetic rats.

IT 149549-14-4P 172485-71-1P

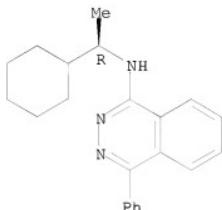
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU

(Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of condensed aminopyridazines as diabetic neuropathy inhibitors causing no hemorrhage)

RN 149549-14-4 CAPLUS

CN 1-Phtalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 172485-71-1 CAPLUS

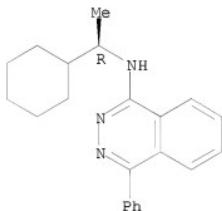
CN 1-Phtalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl-,
(2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 149549-14-4

CMF C22 H25 N3

Absolute stereochemistry.



CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.

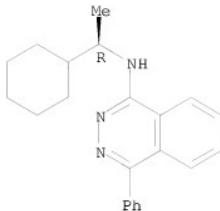


ACCESSION NUMBER: 1996:38242 CAPLUS
 DOCUMENT NUMBER: 124:76533
 ORIGINAL REFERENCE NO.: 124:14025a,14028a
 TITLE: Medicament for therapeutic and prophylactic treatment
 of diseases caused by smooth muscle cell hyperplasia
 INVENTOR(S): Yamada, Kumi; Tamao, Yoshikuni; Ohshima, Masahiro;
 Iwase, Norimichi
 PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
 SOURCE: Eur. Pat. Appl., 15 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| EP 682947 | A1 | 19951122 | EP 1995-107372 | 19950516 |
| EP 682947 | B1 | 19970910 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| US 5643911 | A | 19970701 | US 1995-441743 | 19950516 |
| AT 157871 | T | 19970915 | AT 1995-107372 | 19950516 |
| ES 2109752 | T3 | 19980116 | ES 1995-107372 | 19950516 |
| JP 08034734 | A | 19960206 | JP 1995-118404 | 19950517 |
| JP 2798005 | B2 | 19980917 | | |
| CA 2149691 | A1 | 19951120 | CA 1995-2149691 | 19950518 |
| CN 1116526 | A | 19960214 | CN 1995-106317 | 19950518 |
| PRIORITY APPLN. INFO.: | | | JP 1994-105367 | A 19940519 |

OTHER SOURCE(S): MARPAT 124:76533
 AB A medicament for the therapeutic and prophylactic treatment of a disease
 caused by smooth muscle cell hyperplasia, comprises as an active
 ingredient an aminopyridazine derivative or a salt thereof, e.g.
 (R)-1-(cyclohexylethylamino)-4-phenylphthalazine (I). The compds. are
 useful for the treatment of post-percutaneous transluminal coronary
 angioplasty operative restenosis, stenosis after transplantation of organs
 such as heart, liver, kidney, and vessels, and post-percutaneous
 transluminal angioplasty operative restenosis. I inhibited the
 subendothelial hyperplasia in rat carotid arteries induced by removal of
 intima, by oral administration at the dose of 3 mg/kg.
 IT 149549-14-4P 172485-71-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (aminopyridazine derivs. for treatment of diseases caused by smooth
 muscle cell hyperplasia)
 RN 149549-14-4 CAPLUS
 CN 1-Phthalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 172485-71-1 CAPLUS

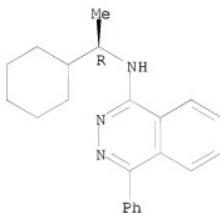
CN 1-Phthalazinamine, N-((1R)-1-cyclohexylethyl)-4-phenyl-,
(2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 149549-14-4

CMF C22 H25 N3

Absolute stereochemistry.



CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



L10 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:649963 CAPLUS

DOCUMENT NUMBER: 119:249963

ORIGINAL REFERENCE NO.: 119:44601a, 44604a

TITLE: 3,6-disubstituted pyridazine derivative blood platelet aggregation inhibitors

INVENTOR(S): Iwase, Norimichi; Morinaka, Yasuhiro; Tamao, Yoshikuni; Kanayama, Toshiji; Yamada, Kumi

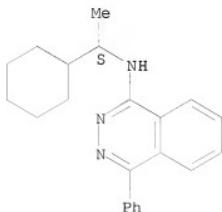
PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan

SOURCE: Eur. Pat. Appl., 115 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------|----------------------|------------------------------------|-----------------|-------------|
| EP 534443 | A1 | 19930331 | EP 1992-116413 | 19920924 |
| EP 534443 | B1 | 19981230 | | |
| R: AT, BE, CH,
JP 06135938 | DE, DK, ES, FR,
A | GB, GR, IE, IT, LI, LU, NL, PT, SE | | |
| JP 2730421 | B2 | 19980325 | JP 1992-239545 | 19920908 |
| CA 2078699 | A1 | 19930327 | CA 1992-2078699 | 19920921 |
| AT 175200 | T | 19990115 | AT 1992-116413 | 19920924 |
| ES 2128333 | T3 | 19990516 | ES 1992-116413 | 19920924 |
| US 5324727 | A | 19940628 | US 1992-950947 | 19920925 |
| US 5462941 | A | 19951031 | US 1994-215426 | 19940321 |
| PRIORITY APPLN. INFO.: | | | JP 1991-247647 | A 19910926 |
| | | | JP 1991-335277 | A 19911218 |
| | | | JP 1992-239545 | A 19920908 |
| | | | US 1992-950947 | A3 19920925 |

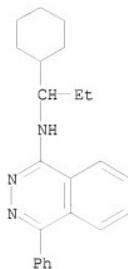
OTHER SOURCE(S): MARPAT 119:249963
 GI For diagram(s), see printed CA Issue.
 AB The title compds. I [A = (un)substituted alkyl, C5-7 cycloalkyl, Ph, thiienyl, furyl, thiazolyl, etc.; B = (un)substituted (cyclic moiety-substituted methyl)amino groups; ring C = benzene ring], useful for the treatment and prevention of ischemic tissue diseases caused by blood platelet aggregation, are prepared. Thus, phthalic anhydride was reacted with cyclohexylmagnesium chloride, producing 2-(cyclohexanoyl)benzoic acid, which was sequentially reacted with NH₂NH₂, POCl₃, and D- α -phenylethylamine, producing the R enantiomer of phthalazine II, which demonstrated 97.1% rat blood platelet agglutination in-vitro inhibitory ratio [(i.e., [(agglutination degree when only a solvent was added (TC) - agglutination degree when a II medicinal solution was added)/TC]+100) at 3 + 10-7 M].
 IT 149549-67-7P 149549-68-8P 149549-69-9P
 149549-70-2P 149549-71-3P 149549-72-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and blood platelet aggregation inhibitory activity of)
 RN 149549-67-7 CAPLUS
 CN 1-Phthalazinamine, N-(1-cyclohexylethyl)-4-phenyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



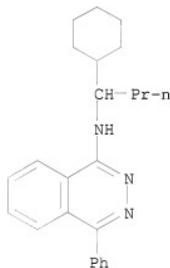
RN 149549-68-8 CAPLUS

CN 1-Phthalazinamine, N-(1-cyclohexylpropyl)-4-phenyl- (CA INDEX NAME)



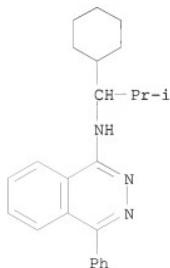
RN 149549-69-9 CAPLUS

CN 1-Phthalazinamine, N-(1-cyclohexylbutyl)-4-phenyl- (CA INDEX NAME)



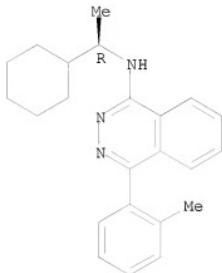
RN 149549-70-2 CAPLUS

CN 1-Phthalazinamine, N-(1-cyclohexyl-2-methylpropyl)-4-phenyl- (CA INDEX NAME)



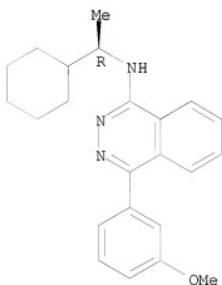
RN 149549-71-3 CAPLUS
CN 1-Phtalazinamine, N-(1-cyclohexylethyl)-4-(2-methylphenyl)-, (R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



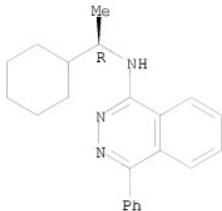
RN 149549-72-4 CAPLUS
CN 1-Phtalazinamine, N-(1-cyclohexylethyl)-4-(3-methoxyphenyl)-, (R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



IT 149549-14-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
 (preparation and reaction of, in blood platelet aggregation inhibitor
 preparation)
RN 149549-14-4 CAPLUS
CN 1-Phtalazinamine, N-[(1R)-1-cyclohexylethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



```
=> logoff
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                               ENTRY        SESSION
FULL ESTIMATED COST          34.84           996.46
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE      TOTAL
                                              ENTRY        SESSION
CA SUBSCRIBER PRICE           -4.92          -89.38
```

STN INTERNATIONAL LOGOFF AT 08:37:23 ON 30 MAR 2009